An interpretative phenomenological analysis of primary school teachers' experiences of attending a mindfulness group

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Declaration

This thesis is submitted for the Doctorate in Clinical Psychology at the University of Sheffield. It has not been submitted to any other institution, or for any other qualification.

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Abstract

This thesis comprises a systematic literature review and a research study.

The literature review aimed to critically evaluate and synthesise the evidence for the effectiveness of mindfulness interventions in targeting burnout within helping-professions. Studies were identified by searching relevant electronic databases using terms related to "mindfulness", "burnout", and "helping-professions".

Subsequently, fourteen studies met the inclusion criteria. These studies were rated as fair quality overall when assessed against a validated quality checklist.

There was tentative evidence found for the effectiveness of mindfulness interventions for targeting burnout, particularly emotional exhaustion. However, the diversity of the mindfulness interventions provided, and various methodological limitations, reduced generalisability. These limitations are discussed, and recommendations for further research suggested.

The research study qualitatively explored the experiences of eleven primary school teachers who had attended a mindfulness group to reduce stress and burnout. Semi-structured interviews were undertaken and interpretative phenomenological analysis was employed. The findings highlighted how mindfulness practices provided an opportunity for participants to reflect upon the contextual pressures and internal processes that contributed to their stress. For the majority of participants this led to an increased understanding of their work role within a wider perspective, enabling value-aligned behavioural change. A number of participants reported an increased sense of connecting and attuning to both their own and their pupils' emotional needs. However, the experience of attending the group and continued engagement in its practices also provided numerous

challenges. The findings are discussed in relation to the literature on occupational stress and burnout, teacher identity, and mindfulness, and implications for clinical practice and future research are reported.

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Abstract

Background

Burnout is endemic within the helping-professions. The impact of burnout is not just deleterious to those directly affected, but can negatively impact upon those people the helping-professions aim to support (e.g., patients), and have adverse organisational consequences (e.g., absenteeism). One intervention that has been used to target burnout in the helping-professions is mindfulness. The aim of this review was to critically evaluate the literature regarding mindfulness interventions targeting burnout for helping-professionals.

Method

A systematic search was undertaken, which involved searching four electronic databases (Web of Science, PsycINFO, Scopus, and Medline) using search terms encompassing "mindfulness", "burnout", and "helping-professions". A validated checklist was used to assess the quality of the included studies.

Results

Fourteen studies were included in the review; seven used randomised controlled designs, two were quasi-experimental, and five used pre-post- test designs. The overall quality of the studies was fair. Although all studies used a version of the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996), there was variability in the reporting of burnout scores. There was some evidence found to support the efficacy of mindfulness interventions in targeting burnout in qualified helping-professionals.

Conclusions

Mindfulness interventions for qualified helping-professionals can potentially reduce burnout. However, greater clarity is needed when measuring and defining burnout. Future research should employ active control arms, and longitudinal follow-up to be clearer about the benefits of mindfulness in targeting burnout.

Practitioner Points

- Mindfulness interventions may be useful as a preventative tool in targeting burnout for qualified helping-professionals.
- Clinical psychologists are well placed to support workplace systems in designing, delivering, and evaluating interventions aimed at targeting burnout.
- Limitations of studies reviewed included a lack of consensus about the definition and cut-off scores for burnout, and a lack of longer term follow-up to assess outcome stability over time.

Introduction

Burnout has been found to be prevalent for those working in the helping-professions (Bruce, Conaglen, & Conaglen, 2005). Newsome, Waldo, and Gruszka (2012) define the helping-professions as those people who "work with others to promote healing and/or learning" (p.297). This includes: nurses, doctors, therapists, social-workers, psychologists, and teachers (Newsome et al., 2012). This review will use this definition of helping-professionals.

Burnout is considered the result of exposure to chronic occupational stress and is conceptualised as a psychological syndrome with three components: emotional exhaustion, depersonalisation, and lack of personal accomplishment (Warren, Schafer, Crowley, & Olivardia; 2013). Emotional exhaustion relates to the high levels of stress experienced by individuals in their occupation and is considered the "central quality" of burnout, and includes feeling overextended by work demands, and emotionally drained (Steinhardt, Smith-Jaggers, Faulk, & Gloria, 2011, p.420). Depersonalisation includes negative and pessimistic attitudes towards one's patients, pupils, and colleagues (Steinhardt et al., 2011), while lack of personal accomplishment is the sense of feeling incompetent, ineffective, and dissatisfied with one's occupation (Warren et al., 2013).

There are a number of factors related to working within helping-professions that are understood to lead to burnout. Firstly, helping-professionals often have to deal with distressed people, which in itself is stressful and pressurised (Shapiro, Warren-Brown, & Biegel, 2007). Secondly, there is an argument that increasing financial constraints on services have led to helping-professionals striving to balance growing demands with diminishing resources, leading to repeated

organisational change (Leiter, Bakker, & Maslach (2014). Indeed, significant links between features of organisational change (e.g., job uncertainty) and burnout have been found (Raftopoulos, Charalambous, & Talias, 2012). There is also evidence that both qualified and trainee helping-professionals are at risk of burnout (Skovholt & Trotter-Mathison, 2011). This is because training in these professions is considered stressful in light of learning new skills, applying learning in practice, and an urgency to get the job right (Pillen, Beijaard, & den Brok, 2013). The consequences of burnout can be significant. For example burnout can have a deleterious effect on an individual's psychological, and physical wellbeing, and there is significant evidence that it can lead to clinical anxiety and depression (Tyssen, Vaglum, Gronvold, & Eckberg, 2001). Burnout can also negatively impact upon those people the helping-professions are trying to support, as the ability to communicate and convey empathy can be compromised, thus creating a barrier in relationship building (Beddoe & Murphy, 2004). For these combined reasons, means of preventing and reducing burnout for helping-professionals are important.

Interventions to reduce burnout

In recent years there has been growing research focussing upon interventions that aim to target burnout within helping-professions such as psychosocial interventions (Ewers, Bradshaw, McGovern, & Ewers, 2002), and skills-development (Cohen & Gagin, 2005). However, one intervention that has started to be applied regularly in targeting burnout for helping-professionals is mindfulness (Shapiro, Astin, Bishop, & Cordova, 2005).

The introduction of mindfulness into clinical settings is attributed to Kabat-Zinn (1994) who developed the Mindfulness-Based Stress Reduction (MBSR) programme. Kabat-Zinn (1994) describes mindfulness as: "the awareness that emerges through paying attention on purpose, in the present moment, non-judgementally to the unfolding of experience" (p.4). MBSR is a group-based, psycho-educative programme, designed to teach participants to increase awareness of, and relate differently to, their thoughts, emotions, and bodily sensations (Shapiro, et al., 2005). MBSR includes eight weekly sessions of 2.5 hours, a day retreat, and home practices.

Research into MBSR and mindfulness has shown it to be effective in reducing stress and enhancing wellbeing in a range of clinical and non-clinical populations (Williams, Kolar, Reger, & Person, 2001). In clinical populations difficulties such as depression and anxiety appear to be targeted by a combination of practices and processes that form the foundations of mindfulness (Malpass et al., 2012). These practices and processes include learning to face difficult feelings, adopting an attitude of compassionate enquiry, and taking a different relationship to experience. In particular, the change in relationship to one's experience of "illness identity" has been hypothesised to be a major component in the effectiveness of mindfulness in such populations (Chadwick, Newell & Skinner, 2008). As Skovholt & Trotter-Mathison (2011) suggest that helping-professionals typically invest emotionally in their work and derive a great meaning from their professional identity, mindfulness may consequently be of relevance when considering interventions targeting burnout in these professions. In addition, as burnout is considered the result of exposure to chronic occupational stress, the benefits of mindfulness in relation to stress alone has led to burgeoning interest in the application of MBSR in targeting burnout. Leiter and Maslach (2014) have

suggested that the potential of mindfulness interventions for burnout may lie in its ability to improve emotion-focused coping, to respond differently to stressors, and enhance relaxation.

Mindfulness in the helping-professions

To date there have been no systematic critical reviews of the studies examining the effectiveness of mindfulness for targeting burnout within helping-professions. However, Irving, Dobkin, & Park (2009) did review ten studies published between 1998 and 2007 that had used MBSR to improve a number of health and wellness outcomes for health-care professionals. The review included randomised controlled studies, non-controlled studies, and pre-post- designs. It concluded that MBSR yielded some benefits for clinician's mental and physical health, but more research was needed. Although starting to add to the literature, this review had a number of methodological limitations. These limitations included: no reported systematic search strategy, and no validated critical appraisal of the papers included. In addition, it also only focussed on health-care professionals at the exclusion of other helping-professionals, and only three studies included measured burnout.

The present review aims to address these limitations by presenting an upto-date review with a transparent and replicable methodology. It will also use a validated critical appraisal tool to critique the studies. The present review will differ from the Irving et al. (2009) review by including studies published after 2007, and by focussing only on studies that have used a validated burnout outcome measure. This review will also widen the focus from health-care professionals to include helping-professionals as defined by Newsome et al. (2012). This is to reflect the

increasing expectations being placed upon helping-professionals located outside of health-care settings (e.g., teachers, social-workers) to support and promote the wellbeing of others (Salter-Jones, 2012). The inclusion of helping-professionals also aims to reflect that many clinical psychologists, through the provision of leadership, consultation, and supervision, are progressively promoting psychological wellbeing in contexts beyond health-care settings (Kirk & Neigher, 2013).

Aim

This systematic review aims to synthesise, critically review, and provide an integration of the evidence for mindfulness-based interventions in targeting burnout in the helping-professions.

Method

Search Strategy

A systematic literature search was conducted between 28th January and 25th March 2015. The strategy involved searching four health and social care databases: Web of Science, PsycINFO (via OVID), Scopus, and Medline (via Ovid). Search terms were divided into three main themes: "mindfulness", "burnout", and "helping-professions". The search terms for helping-professions were: helping profession*, health profession*, caring profession*, nurse*, doctor*, psychologist*, counsel*or, teacher*, social worker*, therapist*, and mental health worker*. Search terms for mindfulness were: mindfulness and mindful*, and the search term for burnout was: burn*out. Search terms within each theme were combined with the Boolean operator "OR", whilst terms across concepts were

combined with "AND". In addition, reference lists from the selected papers were searched by hand checking forward and backward citations.

Studies were included if they met all of the following criteria: 1) mindfulness was the primary component of the intervention; 2) participants were classified as working/training within helping-professions; 3) a validated burnout measure was used; 4) quantitative in design and/or analysis; 5) peer reviewed; 6) published in English; 7) published between January 1980 and 25th March 2015. Studies were excluded if one or more of the following criteria were met: 1) language other than English; 2) study protocol; 3) dissertation protocol; 4) case-study; 5) unpublished article; 6) book chapter; 7) literature review.

Selection

The preliminary search identified 4052 articles. The title and abstract of these articles were screened for relevance and included if they referred to the use of mindfulness with helping-professionals. Four hundred and ninety six articles were chosen for review against the inclusion and exclusion criteria. Following this 419 articles were excluded and 77 full-text articles were accessed. Of these, 14 articles were considered eligible for inclusion in this review. An overview of the process can be seen in figure 1.

Quality assessment of studies

Study quality was measured against the criteria defined by the Downs and Black (1998) 27-item checklist (Appendix A). This checklist is a recognised quality assessment tool for systematic reviews, and has been used extensively to assess the quality of studies (Deeks et al., 2003). It is an appropriate appraisal tool for evaluating interventions and outcomes for randomised and non-randomised

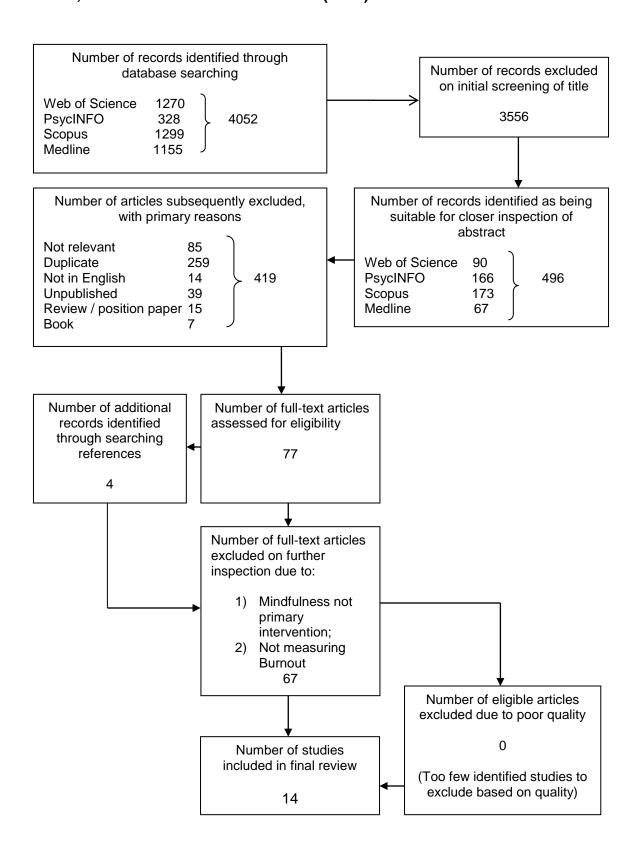
studies. As within a number of previous reviews (e.g., MacLehose et al., 2000), the checklist was adapted to meet the needs of this current review by removing items 14 and 24. This was to acknowledge that blinding of participants is not common practice within studies assessing psychological interventions (Stephenson & Imrie, 1998). The item relating to statistical power was also amended to score either 0 or 1, with 1 indicating a power calculation had been reported and/or whether it was an adequately powered study. A score of 1 was given for each item on the checklist that was met by each study. Consequently a maximum score of 25 was available. Similarly to Samoocha, Bruinvels, Elbers, Anema, and Van der Beek (2010) the classification of overall scores were proportionally adjusted to take into account this modified maximum score. Overall scores for this review were classified as: excellent (23 to 25), good (18 to 22), fair (13 to 17), and poor (12 or below). The quality rating scores for the studies ranged from 11 to 22, with a mean score of 16 (*SD* = 2.88) (see Appendix B for detailed ratings).

Three of the 14 studies reviewed were rated as good quality, nine studies were rated as fair quality, and two studies were rated as poor quality. However, due to the paucity of studies retrieved during the search process those rated as poor were still included for discussion within the review. Nonetheless issues of quality were not neglected as they impact upon the validity, reliability, and generalisability of results. Thus, a score for the overall quality of each study is presented in Table 1. The quality ratings of studies were also considered within the narrative synthesis, and in relation to any tentative conclusions drawn.

To assess the reliability of the quality ratings, an independent rater (trainee clinical psychologist) with experience of using the Downs and Black (1998)

checklist blind-rated four of the reviewed papers. These four papers were randomly selected and inter-rater reliability was (Cohen's k = 0.42), demonstrating overall that there was moderate agreement between the two raters (Altman, 1991). Any discrepancies and inconsistencies within the ratings were then settled through detailed discussion.

Figure 1. Flow chart detailing search process adapted from Moher, Liberati, Tetzlaff, Altman & The PRISMA GROUP (2009).



Results

Study Characteristics

The studies included in this review are summarised in table 1.

Design

The 14 reviewed studies employed a variety of research designs, including randomised controlled trial (RCT), non-randomised quasi-experimental, and single sample pre-post- test designs. Three studies that had been included in Irving et al.'s (2009) review and measured burnout (Cohen-Katz, Wiley, Capuano, Baker, & Shapiro, 2005; Mackenzie, Poulin, & Seidman-Carlson, 2006; Shapiro et al., 2005), were included in this present review.

Three studies employed the original MBSR intervention in terms of length and content (Barbosa et al., 2013; Cohen-Katz et al., 2005; Goodman & Schorling, 2012). Three studies provided mindfulness interventions that were the same length as the original MBSR programme, and had similar content, but included a more specific focus upon the participants' professions (Flook, Goldberg, Pinger, Bonus, & Davidson, 2013, Krasner et al., 2009; Martin-Asuero et al., 2014). In this review all of the aforementioned interventions are described as "full-length MBSR". Eight studies provided mindfulness interventions which acknowledged MBSR principles, but were shorter than the original interventions. Five of these eight studies provided between 15 and 18 hours intervention time. Within this review these are described as "mid-length MBSR" interventions (DeVibe et al., 2013; Fortney, Luchterhand, Zakletskaia, Zgierska, & Rakel, 2013; Galantino, Biame, Maguire, Szapary, & Farrar 2005; Moody et al., 2013; Shapiro et al., 2005). The three remaining studies providing between two and four hours intervention time (Brady, O'Connor, Burgermeister, & Hanson, 2011; Mackenzie et al., 2006; Poulin,

Mackenzie, Soloway, & Karayolas, 2008) are described as "brief-MBSR". All 14 studies included only those working in the helping-professions (n = 12), or training to work in these professions (n = 2).

Measures

All the studies used a version of the Maslach Burnout Inventory (MBI: Maslach, Jackson, & Leiter, 1996). The MBI measures emotional exhaustion, depersonalisation, and lack of personal accomplishment. All the studies with qualified participants used the 22-item MBI–Human Services Survey (MBI-HSS; Maslach, Jackson, & Leiter 1996) except for Flook et al. (2013) who used the MBI-Educators Survey (MBI-ES; Maslach, Jackson, & Leiter 1996). This version has minor semantic changes to the questions (e.g., replacing the word patients with pupils). The two studies with trainee participants (Barbosa et al., 2013; DeVibe et al., 2013) used the 15-item student survey (MBI-SS, Schaufeli, Martinez, Marques-Pinto, Salanova, & Bakker, 2002). The MBI-SS has more focus upon burnout in relation to academia such as conceptualising emotional exhaustion in relation to study demands (Yavaz & Dogan, 2014).

An inconsistent range of measures were used to assess a number of other outcomes across the studies including: stress (n = 5), empathy (n = 3), satisfaction with life, (n = 3), mood states (n = 3), anxiety (n = 2), depression (n = 2), compassion (n = 2), relaxation (n = 2), salivary cortisol (n = 2), wellbeing (n = 1), and resilience (n = 1). Six studies assessed mindfulness as an outcome using a variety of measures (Brady et al., 2011; Cohen-Katz et al., 2005; DeVibe et al., 2013; Flook et al., 2013; Krasner et al., 2009; Martin-Asuero et al., 2014).

Table 1

Description of studies included in review

Study	N	Design	Follow- up	Participants	Intervention ¹	Measures ²	Burnout outcome ³	Quality rating ⁴
Barbosa et al. (2013): USA	31	Quasi- experimental	3 weeks	Medical, occupational therapy, physiotherapy, and nursing students.	Full-length MBSR (8-week x 2.5 hours, plus day retreat; total 28 hours).	MBI-SS, BAI JSPE.	MBI-SS - no significant differences found between groups on EE, DP, & LPA components MBI at 8 weeks or 3 week follow-up.	17
Brady et al. (2011): USA	23	Single sample pre- post test	None	Mixed in-patient psychiatric staff	Brief MBSR (4- week x 1 hour; total 4 hours).	MBI-HSS, MHPSS, TMS, SOSS.	MBI-HSS - no significant change on EE, DP, & LPA component.	15
Cohen-Katz et al. (2005): USA	27	RCT	3 months	Nurses, pastoral care, respiratory therapy, social- workers	Full-length MBSR (8-week x 2.5 hours, plus day retreat; total 28 hours).	MBI-HSS, BSI, MASS.	MBI-HSS - significant change on the EE (p=0.05) & LPA (p=0.01) components at 8 weeks.	17
De Vibe et al. (2013): Norway	288	RCT	None	Medical & psychology students	Mid-length MBSR (6- week x 1.5 hours, plus day retreat; total 15 hours).	MBI-SS, GHQ, PMSS, SWB, FFMQ-39.	MBI-SS – No significant differences found between groups.	22
Flook et al. (2013): USA	18	RCT	None	Teachers	Full-length MBSR adapted for teachers. (8-week x 2.5 hours, plus day retreat; total 28 hours).	MBI-ES, SCL90- R, CLASS, FFMQ-39, CANTAB, Cortisol Measurement.	MBI-ES – significant change on the EE component (p=0.038);	18

Study	N	Design	Follow- up	Participants	Intervention ¹	Measures ²	Burnout outcome ³	Quality rating ⁴
Fortney et al. (2013): USA	30	Single sample pre- post test	9 months	Primary Care Clinicians	Mid-length MBSR (1-week x 14 hours, plus 2-week x 2 hours; total 18 hours)	MBI-HSS, DASS, PSS, RS-14, SCBC.	MBI-HSS – significant change on EE (p=0.006), DP (p=0.03), & LPA (p<0.001) components at 8 weeks. Significant change on EE (p=0.009), DP (p=0.005), & LPA (p<0.001) components maintained at 9 months follow-up.	14
Galantino et al. (2005): USA	84	Single sample pre- post test	None	Mixed health- care professionals	Mid-length MBSR (8-week x 2 hours; total 16 hours).	MBI-HSS, POMS- SF, IRI, Cortisol measurement.	MBI-HSS – significant change on EE (p=0.001) component.	11
Goodman & Schorling (2012): USA	93	Single sample pre- post test	None	Mixed health- care professionals	Full-length MBSR (8-week x 2.5 hours, plus day retreat; total 28 hours).	MBI-HSS, SF- 12v2.	MBI-HSS – significant change on EE (p<0.03), DP (p<0.04) & LPA (p<0.001) components.	12
Krasner et al. (2009): USA	70	Single sample pre- post test	12 & 15 months	Primary Care Clinicians	Mindful communication (Full- length MBSR) (8 x 2.5 hours, plus day retreat)	MBI-HSS, 2-FMS, JSPE, PBS, POMS.	MBI-HSS – significant change on EE (p<0.001); DP, (p<0.001) & LPA (p<0.001) components at 8 weeks; EE (p<0.001), DP (p=<0.001), & LPA (p<0.001) at 12 months; EE (p<0.001), DP (p=<0.001) at 15 months follow-up.	13

			up	•				rating4
Mackenzie et al. (2006): Canada	30	RCT	None	Nurses, nurse aides	Brief MBSR (4- weeks x 30 mins; total 2 hours).	MBI-HSS, SRDI, IJSS, SWLS, OTLS.	MBI-HSS – significant group x time interaction for EE (p<0.05), & DP (p<0.01) components in intervention group.	15
Martin- Asuero et al. (2014): Spain	68	RCT	None	Physicians, nurses, social- workers, clinical psychologists	Mindful communication (Full- length MBSR) (8-week x 2.5 hours, plus day retreat).	MBI-HSS, JSPE, FFMQ, POMS.	MBI-HSS – significant change on EE (p<0.01), DP (p<0.01), & LPA (p<0.01), components in the intervention group.	19
Moody et al. (2013): USA/Israel	47	RCT	None	Paediatric Oncology staff; nurses, social- workers, physicians, psychologists	Mid-length MBSR (1 week x 6 hours, 6 weeks x 1 hour, 1 week x 3 hours; total 15 hours).	MBI-HSS, PSS, BDI.	MBI-HSS - no significant change on EE, DP, & LPA components.	17
Poulin et al. (2008): Canada	40	Quasi- experimental	None	Nurses, nurse aides	Brief Mindfulness (4-week x 30 mins; total 2 hours).	MBI-HSS, SWLS, SRDI.	MBI-HSS – significant group x time interaction on the EE component.	15
Shapiro et al. (2005): USA	38	RCT	None	Physicians, nurses, social- workers, clinical psychologists	Mid-length MBSR (8- weeks x 2 hours, minus day retreat; total 16 hours).	MBI-HSS, BSI, SWLS, SCS, PSS.	MBI-HSS – no significant change on EE, DP, & LPA components.	16

Intervention1

Measures2

Burnout outcome3

Quality

Study

N

Design

Follow-

Participants

- 1) Key: BAI = Burns Anxiety Inventory; BDI = Beck Depression Inventory; BSI = Brief Symptom Inventory; CANTAB = The Cambridge Neuropsychological Test Automated Battery; CLASS = The Classroom Assessment Scoring System; DASS = Depression, Stress and Anxiety Scale; FFMQ-39 = Five-Facet Mindfulness questionnaire; 2-FMS = 2-factor Mindfulness Scale; GHQ = General Health Questionnaire; IJSS = Intrinsic Job Satisfaction Subscale; IRI = Interpersonal Reactivity Index; JSPE = Jefferson Scale of Physician Empathy; MASS = Mindfulness Attention Awareness Scale; MBI-ES = Maslach Burnout Inventory-Educators Survey; MBI-HSS = Maslach Burnout Inventory-Human Services Survey; MBI-SS = Maslach Burnout Inventory-Student Survey; MHPSS = Mental-Health Professionals Stress Scale; OTLS = 13-item Version of Orientation to Life Scale; PBS = Physician Belief Scale; PMSS = Perceived Medical School Stress Scale; POMS = The Profile of Mood States; POMS-SF = The Profile of Mood States-Short Form; PSS = Perceived Stress Scale; RS-14 = Resilience Scale; SCBC = Santa Clara Brief Compassion Scale; SCL90-R = Symptom Checklist; SCS = Self Compassion Scale; S-12v2 = SF-12 Health Survey; SOSS = Sense of Self Scale; SRDI = Smith Relaxation Dispositions Inventory; SWB = Subjective Well-being; SWLS = Satisfaction with Life Scale, TMS = Toronto Mindfulness Scale.
- 2) Brief-MBSR = <10 hours; Mid-length MBSR = 10-27 hours; Full-length MBSR = 28+ hours
- 3) EE = Emotional exhaustion; DP = Depersonalisation; LPA = Lack of personal accomplishment.
- 4) 23-25 Excellent; 18-22 Good; 13-17 Fair; <12 Poor

Synthesis of findings for burnout outcomes

Interventions reducing all three burnout components. Four studies found that the mindfulness intervention significantly reduced all three components of burnout as measured by the MBI. Two of these studies (Fortney et al., 2013; Krasner et al., 2009), were rated as fair quality, and the study by Martin-Asuero et al. (2014), as good quality. The study by Goodman & Schorling, (2012), was rated as poor quality due to a number of methodological limitations. Participants in all four studies were qualified helping-professionals. Three studies provided fulllength mindfulness interventions, while Fortney et al. (2013) provided a mid-length intervention (18 hours). All four studies were limited by their relatively small sample sizes (range 30 – 93). Unfortunately as Goodman & Schorling, (2012), and Martin-Asuero et al. (2014) only collected data at pre- and post-intervention, it is not possible to assess the sustainability of change over time from these studies. However, in comparison Fortney et al. (2013), and Krasner et al. (2009), had the longest follow-up of all the studies included in this review. They found the improvements in all three burnout components were maintained at follow-up, thus demonstrating stability of change over time, and supporting the potential longerterm impact of the mindfulness interventions. None of the four studies had an active control group, limiting the inferences that can be made in relation to mindfulness specifically providing the active change ingredient. However, Martin-Asuero et al. (2014), benefitted from having a waiting-list control thus strengthening their assertion that the improvements in burnout scores were attributable to the intervention.

In summary, the findings of these four studies provide tentative evidence indicating that interventions of >18 hours are helpful for reducing all three components of burnout for qualified helping-professionals. There is also some limited evidence that these changes remain stable over time.

Differential impact on burnout components. There were a number of studies that showed some impact in reducing burnout on one (Galantino et al., 2005; Poulin et al., 2008), or two of the three conceptual components (Cohen-Katz et al., 2005; Flook et al., 2013; Mackenzie et al., 2006). Interestingly, when this was the case it was always emotional exhaustion (Galantino et al., 2005; Poulin et al., 2008), or the emotional exhaustion component plus for example personal accomplishment (Cohen-Katz et al., 2005; Flook et al., 2013), or depersonalisation (Mackenzie et al., 2006) that improved. There were no studies where lack of personal accomplishment or depersonalisation scores significantly improved in isolation. Therefore across all studies emotional exhaustion was the component most consistently and frequently improved.

Emotional Exhaustion. For the nine studies that demonstrated a significant impact from the mindfulness intervention upon emotional exhaustion, the interventions varied. For example, five of these studies (Cohen-Katz et al., 2005; Flook et al., 2013; Goodman & Schorling, 2012; Krasner et al., 2009; Martin-Asuero et al., 2014) provided full-length MBSR programmes with day retreat. Two studies provided mid-length interventions (Galantino et al., 2005; Fortney et al., 2013), and two studies (Mackenzie et al., 2006; Poulin et al., 2008) provided brief interventions (two hours).

The methodological designs across these nine studies also varied, consisting of RCTs, quasi-experimental designs, and pre- post-intervention studies.

One point of convergence for these nine studies was that they all comprised qualified participants, and did not include trainees.

The two studies (Galantino et al., 2005; Poulin et al., 2008) that solely found a significant reduction in the emotional exhaustion were of variable quality. The Galantino et al. (2005) study was rated as poor quality due to a number of methodological limitations including no control, no follow-up, and high attrition. Conversely, the study by Poulin et al. (2008) was rated as fair quality. This study found that emotional exhaustion not only significantly reduced between pre- and post-intervention (mirroring the Galantino et al., 2005 findings), but that this reduction was significantly greater than both a waiting-list control and an active control (relaxation). Therefore this was the only study that could legitimately conclude that there was an active ingredient of the mindfulness intervention that reduced emotional exhaustion. This study also adds support to brief interventions having merit.

Similarly to Poulin et al. (2008), the study by Mackenzie et al. (2006) which was an RCT and rated as fair quality also provided a brief (4 x 30 minute) mindfulness approach. This study found a significant effect of the intervention upon emotional exhaustion and depersonalisation components of burnout. In combination, therefore, these two studies provide some evidence that brief mindfulness programmes can lead to significant reductions in some components of burnout, most notably emotional exhaustion. However, as neither study collected follow-up data, and did not report dose-effect, it is not possible to surmise that this

change would either remain stable over time, or would be comparable with the outcomes following a full or mid-length MBSR in the longer-term.

Lack of personal accomplishment. The two studies that found a significant improvement for a combination of the emotional exhaustion and lack of personal accomplishment components were Cohen-Katz et al. (2005) and Flook et al. (2013). Flook et al. (2013) was rated as the better quality of these studies, being assessed as good. Both of these studies provided full-length MBSR interventions. Although Flook et al. (2013) did not provide follow-up data, the study by Cohen-Katz et al. (2005) provided three month follow-up. Over this time period they found that although the changes in emotional exhaustion remained significant, the changes on the lack of personal accomplishment component dropped off. This raises questions about the stability of change over time in relation to the personal accomplishment component. The maintenance of the change on the emotional exhaustion, however, lends support to the possible impact of brief, mid-length and full-length mindfulness interventions on this component.

In all, six studies demonstrated a significant reduction in lack of personal accomplishment for samples of qualified helping-professionals (Cohen-Katz et al., 2005; Flook et al., 2013; Fortney et al., 2013; Goodman & Schorling, 2012; Krasner et al., 2009; Martin-Asuero et al., 2014). With the exception of Fortney et al. (2013) who provided a mid-length intervention (18 hours), all provided full-length MBSR interventions with day retreat.

Depersonalisation. Five studies identified a significant impact on the depersonalisation component of burnout (Fortney et al., 2013; Goodman & Schorling, 2012; Krasner et al., 2009; Mackenzie et al., 2006; Martin-Asuero et al.,

2014). The intervention lengths in these studies varied from brief to full-length. Of these the three full-length and one mid-length intervention demonstrated changes in conjunction with shifts in both the other two components, while the brief intervention study by Mackenzie et al. (2006) showed changes in depersonalisation alongside just emotional exhaustion. For Mackenzie et al. (2006) the intervention groups' score on the depersonalisation component remained relatively stable but the scores for the control group deteriorated significantly thus producing a significant group x time interaction. This may indicate that a brief mindfulness intervention, while not improving depersonalisation could play a role in preventing a further decline.

Null findings on all burnout components. Five studies reported that the mindfulness intervention did not have any significant impact upon burnout (Barbosa et al., 2013; Brady et al., 2011; DeVibe et al., 2013; Moody et al., 2013; Shapiro et al., 2005). Two of these studies (DeVibe et al., 2013; Shapiro et al., 2005), did not report the burnout scores individually, but reported a total score. Although this way of reporting burnout is acceptable (Morgan, de Bruin, & de Bruin, 2014), it limited the opportunity to explore whether there were any differences between the three components. This was unfortunate in relation to the DeVibe et al. (2013) study as overall it was rated as good quality, had the largest sample size of all the studies reviewed (n = 288) and was sufficiently powered. It also had low attrition, included a wait-list control, and was well described. The study by Shapiro et al. (2005), however had a much smaller sample (n = 38) with fairly high levels of drop-out. Both these studies utilised mid-length interventions.

Both studies including trainees as participants (Barbosa et al., 2013; DeVibe et al., 2013) found no significant change in burnout scores. The Barbosa et al. (2013) study was rated as fair quality and provided full-length MBSR. This was a much smaller study than the DeVibe et al. (2013) study, and was quasi-experimental. Although the findings from both studies with trainee populations did not find any significant reduction in burnout, due to their differences in sample size, intervention length etc., it is difficult conclude as to the impact of mindfulness on trainee populations specifically.

The remaining studies by Brady et al. (2011), and Moody et al. (2013), were rated as fair quality and provided mid-length (Moody et al., 2013) and brief (Brady et al., 2011) interventions for qualified helping-professionals.

Infrequently assessed outcomes. An inconsistent range of other psychological outcomes were measured across studies which makes synthesising the findings difficult. Of these outcomes, three of the most commonly measured were: stress, empathy, and mindfulness. Stress, which when related to one's occupational setting is considered a route to burnout (Steinhardt et al., 2011), was measured by five studies. The findings for stress outcomes however were inconclusive. Three studies detected significant change (Brady et al., 2011; Fortney et al., 2013; and Shapiro et al., 2005), one identified this change for women only (DeVibe et al., 2013) and one found no detectable improvement (Fortney et al., 2013).

Empathy is hypothesised to be impacted upon by burnout, particularly in relation to depersonalisation (Beddoe & Murphy, 2004). This outcome was measured in three studies. Of these studies (Barbosa et al., 2013; Krasner et al.,

2009; Martin-Asuero et al., 2014) only one identified significant positive changes in empathy as a consequence of the mindfulness intervention (Krasner et al., 2009).

All studies measuring mindfulness identified significant improvements in this construct post-intervention (Brady et al., 2011; DeVibe et al., 2013; Krasner et al., 2009; Martin-Asuero et al., 2014). There was no clear relationship found between length of intervention and positive outcomes on these measures.

Intervention evaluation. Five studies evaluated the acceptability of the interventions for participants (Barbosa et al., 2013; Brady et al., 2011; Cohen-Katz; et al., 2005; Martin-Asuero et al., 2014; Shapiro et al., 2005). The methods of evaluation varied, and included closed and open-ended questions (Brady et al., 2011; Martin-Asuero et al., 2014), and Likert scales (Barbosa et al., 2013; Cohen-Katz et al., 2005; Shapiro et al., 2005). The results of these evaluations were overwhelming positive. However, a limitation of these evaluations is the relatively high attrition rates in the Barbosa et al. (2013), Brady et al. (2011), and Shapiro et al. (2005) studies. This means that the evaluations were only completed by those who successfully finished the intervention, possibly creating a response bias.

Critical appraisal

A number of methodological limitations emerged whilst evaluating the reviewed studies.

Sample size. Overall the sample size of the studies was relatively low, with only the study by DeVibe et al. (2013) having >100 participants (n = 288). Therefore the median number of participants across studies was only 39, with a mean of 63.3, and a range of 18 to 288. This is a significant limitation as small

sample sizes can mean that studies are not powered sufficiently limiting conclusions that can be drawn (Moher, Dulberg, & Wells, 1994). Indeed only the studies by DeVibe et al. (2013), and Krasner et al. (2009) reported power calculations, and only DeVibe et al. (2013) had a large enough sample (n = 288) to detect a .8 effect size.

Participant characteristics. The reporting of participant characteristics across the studies was limited, with only nine studies (62%) reporting age, and only four (29%) reporting ethnicity. The omission of such details limits the capacity to generalise whether outcomes are representative of the entire population. The majority of studies however did provide information regarding participant specific occupational roles, although only seven reported the average length of time (mean = 14.8 years) that participants had been training or working in their professions. This paucity of information again reduces the opportunity to locate the participants and the results in the wider working population.

Twelve studies reported information on gender and 11 utilised predominantly female samples (mean 87%). Only the study by Krasner et al. (2009) reported a sample where a majority of participants were male (54%). Although a number of studies acknowledged this limitation (DeVibe et al., 2013; Fortney et al., 2013; Martin-Asuero et al., 2014; Moody et al., 2013; Poulin et al., 2008), and it is widely accepted that more females work within helping-professions (Watt, 2010), this again limits generalisability.

All the studies reported that working/training in the chosen organisation, and willingness to attend sessions were the inclusion criteria. All participants were self-selecting and recruited through convenience sampling. Although acknowledged as

a limitation by five studies (Brady et al., 2011; DeVibe et al., 2013; Fortney et al., 2013; Krasner et al., 2008; Martin-Asuero et al., 2014), this method of recruitment increases the likelihood that participants may not be representative of the wider population working within helping-professions. Thus those who attended the groups may have been more motivated, or more in need of support, than many helping-professionals. Self-selecting samples may also have encouraged a bias towards participants who were more open to mindfulness practice.

Study design and analysis. A significant methodological limitation across most studies was lack of follow-up data. Ten studies only collected data at the beginning and end of the intervention (Brady et al., 2011; DeVibe et al., 2013; Flook et al., 2013; Galantino et al., 2005; Goodman & Schorling, 2012; Mackenzie et al., 2006; Martin-Asuero et al., 2014; Moody et al., 2013; Poulin et al., 2008; Shapiro et al., 2005). Only four studies collected follow-up data. Three of these were within nine months post-intervention, at three weeks (Barbosa et al., 2013); three months (Cohen-Katz et al., (2005); and nine months (Fortney et al., 2013), respectively. Only the study by Krasner et al. (2009) collected longer-term follow-up data from over a year, with collection points at 12 and 15 months post-intervention. As such, the overall paucity of follow-up data restricts any inferences about the sustainability of change.

Across the studies attrition rates varied with four reporting no attrition (Flook et al., 2013; Mackenzie et al., 2006; Martin-Asuero et al., 2014; Poulin et al., 2008), three studies reporting attrition < 20% (Cohen-Katz et al., 2005; DeVibe et al., 2013; Moody et al., 2013), and seven studies reporting attrition >20% (Barbosa et al., 2013; Brady et al., 2011; Fortney et al., 2013; Galantino et al., 2005, Goodman

& Schorling, 2012; Krasner et al., 2009; Shapiro et al., 2005). However, only seven studies adequately described the reason why participants dropped-out, or their characteristics (Barbosa et al., 2013; Brady et al., 2011; Fortney et al., 2013; Galantino et al., 2005; Goodman & Schorling, 2012; Moody et al., 2013; Shapiro et al., 2005). Adequate reporting and understanding of attrition is important as high rates could indicate difficulties with the feasibility and acceptability of interventions in real-world settings.

Five studies did not have a control arm in their research due to employing a pre- post-test design (Brady et al., 2011; Fortney et al., 2013; Galantino et al., 2005; Goodman & Schorling, 2012; Krasner et al., 2009). However, the majority of the studies included a waiting-list control condition which is a strength, although only Poulin et al. (2008) included an active control. These omissions in control conditions across the studies limit the conclusions that any changes identified resulted specifically from the mindfulness intervention.

Intervention delivery and fidelity. All the studies provided clear descriptions of the interventions enabling replication. A significant limitation across all studies, however, was that none reported fidelity checks regarding the provision of the interventions. This reduces the reliability of the findings and could call into question issues such as the possibility of intervention provider "drift" having occurred (Waller, 2009). In addition, the majority of the studies did not provide information regarding the levels of participant attendance of the mindfulness group and/or homework compliance. This again limits the reliability of the findings.

Locating level of burnout in wider population. Although the majority of the studies reported that higher burnout would by signified by higher scores on the emotional exhaustion and depersonalisation components, and lower scores on the lack of personal accomplishment component, only three studies provided cut-off scores (Goodman & Schorling, 2012; Krasner et al., 2009; Moody et al., 2013). In addition, only two studies located their participants' level of burnout at baseline by presenting normative scores for the appropriate professions (Brady et al., 2011; Fortney et al., 2013). This lack of information limits the opportunity to make meaningful comparisons with the norms for the wider population of helping-professionals.

Discussion

This review is the first to systematically examine the evidence for mindfulness interventions in targeting burnout for helping-professionals. Research in the field is relatively new with all the studies identified being post 2005.

Five of the studies reviewed found no evidence to suggest mindfulness had a positive impact on burnout. However, nine studies showed some tentative evidence to suggest its benefit. Specifically, there was some support that, for qualified helping-professionals, full and mid-length mindfulness interventions had a positive impact upon all three components of burnout (emotional exhaustion, depersonalisation, lack of personal accomplishment). There was no evidence, however, to indicate that the brief mindfulness interventions worked on targeting all three components simultaneously.

The results found that mindfulness interventions were most successful in targeting the emotional exhaustion component of burnout, with nine studies showing significant change. In contrast to the finding indicating that only full and

mid-length interventions impacted on burnout as a three component construct, the mindfulness interventions that seemed to impact solely upon emotional exhaustion ranged from full-length to the briefest interventions. Similarly the mindfulness interventions that had a significant impact upon the depersonalisation component varied in length. However, for the lack of personal accomplishment component only those studies providing full-length interventions showed a significant improvement. Thus the findings from the review suggest that while more comprehensive mindfulness interventions are potentially more successful in targeting lack of personal accomplishment and/or all three components, emotional exhaustion and depersonalisation are less discriminative of the length of intervention.

Of the three components of burnout, emotional exhaustion at preintervention was the one most consistently elevated in the samples. In addition it
was the component most consistently impacted upon by the mindfulness
interventions. As Maslach, Schaufeli & Leiter (2001) propose that emotional
exhaustion is a precursor to the phenomenon of depersonalisation and lack of
personal accomplishment, such a finding could be clinically significant. This is
because by targeting emotional exhaustion, then later phenomenon of full-scale
burnout could potentially be prevented. The fact that Poulin et al., (2008) found no
impact from the relaxation control intervention also potentially suggests that there
are other mechanisms to mindfulness beyond relaxation that are important in
reducing emotional exhaustion. These mechanisms could be related to
improvements in emotion focused coping and changes in the way participants
respond to stressors, as suggested by Leiter and Maslach (2014). In addition,

given that mindfulness can bring about a change in relation to "illness identity" (Chadwick, Newell & Skinner, 2008) then hypothetically a change in relationship to one's professional identity could have played a role in improvements in emotional exhaustion.

If one were to assess the reviewed studies against the cut-offs for high risk of burnout as proposed for health-care providers by Thorsen, Teten-Tharp, and Meguid (2011); (emotional exhaustion >27, depersonalisation > 10, lack of personal accomplishment < 32), only the participants in the Moody et al., (2013) study were "high-risk" on all three components pre-intervention. However, emotional exhaustion in qualified staff when measured separately at pre-intervention, was consistently found to be near, or above this cut-off point (range 24 – 31) across all studies. That the Moody et al. (2013) study did not show any benefit from the mindfulness intervention, while emotional exhaustion consistently showed the most reliable post intervention reduction across the studies, raises a question of whether mindfulness-based approaches are helpful in lowering the risk of burnout, but are less helpful when professionals are actually burnt-out.

Another important finding is that across the studies reviewed there was no consensus as to the "cut-off" for burnout. Although where commented upon, the cut-off ranges used were similar, the majority of the studies treated burnout as a continuous variable with no clear demarcation as to when a person would be considered "burnt-out", or at risk of burnout. This finding is reflective of a wider debate within the literature on burnout. For example, although the authors of the MBI (Maslach, Jackson, & Leiter, 1996) suggest normative numerical cut-off points

defined as three equal groups of 33.3%¹, Schaufeli, Bakker, Hoogduin, and Kladler, (2001) argue that these definitions are "arbitrary".

This review found inconclusive evidence regarding the use of mindfulness approaches for student/training populations. Only two studies (Barbosa et al., 2013; DeVibe et al., 2013) reported on these populations, and drawing conclusions from these was difficult. This was because reporting of burnout scores was not comparable between the studies, or against the studies reviewed with qualified helping-professionals. Although high levels of burnout have been found in trainees (Dreary, Watson, & Hogston, 2003), the studies in this review also did not present normative data against which to compare their findings.

Future research

Based on the findings of this review further randomised controlled studies are recommended. In particular, inclusion of active control options that may also have promise for reducing burnout for helping-professionals (e.g., skills development approaches) or could help differentiate the active mechanisms of mindfulness (e.g., relaxation) would be helpful. It would also be prudent to undertake studies comparing the different lengths of mindfulness interventions, with longitudinal follow-up. This would enable a better understanding of the possible "dose effect" (Klatt, Buckworth, & Malarkey, 2009) achieved by the briefer approaches. Indeed, as most studies did not include follow-up data, future research would benefit more generally from its inclusion. This is because it is important to ascertain whether any significant changes are maintained, as

¹ Top, intermediate, and bottom 33.3% scores correspond to "high", "average", and "low" burnout respectively.

interventions that have a short-term impact although not without merit, may have limited value as longer-term solutions for targeting burnout (Leiter & Maslach, 2014).

As discussed earlier there is some uncertainty regarding the definition of, and cut-off scores for burnout. With this in mind, future research may benefit from clearly locating participant burnout scores against normative sample data to enable comparison across studies.

Of the five studies evaluating the acceptability of the mindfulness interventions, all demonstrated it to be valued by the participants who completed it. However, there was high variance between the studies in terms of attrition, and all participants were self-selecting. This leads to questions about what may impact upon a person's decision to take part in, complete, or drop-out of a mindfulness group, and whether the work context played a part in this. As MBSR was originally designed for clinical populations, future research may benefit from further exploring questions of acceptability for non-clinical participants. In addition, as Skovolt and Trotter-Mathison (2011) suggest many helping-professionals emotionally invest themselves into their role, thus qualitative research into how mindfulness may impact upon participants' relationship with their professional identity may be warranted.

Limitations of review

The current review is limited as it only included studies that were published in English, and thus there may have been a bias in the study selection. Also although four studies were independently rated for quality which was a strength, inter-rater reliability could have been improved if all studies had been independently rated. In addition, none of the studies reviewed included participants working in the helping-professions in the UK, which would reduce generalisability to this population

Implications for Clinical Practice

The findings of this review suggest that mindfulness interventions may play a role in targeting burnout for helping-professionals, in particular reducing emotional exhaustion. This has important clinical implications as many people who become burnt-out may become recipients of psychological services for conditions such as depression (Tyssen et al., 2001). Therefore, interventions aimed at preventing a progression into burnout could be valuable both clinically and economically. Workplace screening, to identify high levels of emotional exhaustion indicative of burnout, may also be beneficial to enable preventative action (Warren et al., 2013). Clinical psychologists, through leadership, consultation, and supervision within helping-professions, are well placed to support systems in designing, delivering, and evaluating such interventions, thus promoting the wellbeing of all staff (The British Psychological Society, 2013).

While there is promising research in support of briefer mindfulness interventions, there will be an ongoing need for standards of practice to be upheld so as not to dilute the active ingredients of mindfulness approaches. The

upholding of standards through ethical practice, provision of training, and measurement of fidelity, are important issues for clinical psychologists to reflect upon in their practice.

Conclusions

The present review synthesised studies that had used mindfulness interventions to target burnout for helping-professionals. It found tentative evidence that mindfulness interventions can reduce burnout symptoms for qualified helping-professionals, but not for trainee populations. Interventions of this kind may therefore be useful as a preventative tool in targeting burnout in these staff groups. Clinical psychologists are well placed to support workplace systems in the design, delivery and evaluation of such interventions. However, greater clarity is needed when measuring and defining burnout. Future research should employ randomised control designs, with active control arms and longitudinal follow-up to be clearer about the benefits of mindfulness in targeting burnout. Qualitative research into the experiences of helping-professionals attending work-based mindfulness groups is also recommended.

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Appendix A

Downs and Black's (1998) adapted quality rating checklist

	Question	Score
1	Is the hypothesis/aim/objective of the study clearly described?	1 - Yes 0 - No 0 - Unable to determine (UTD)
2	Are the main outcomes to be measured clearly described in the Introduction or Methods section? If the main outcomes are first mentioned in the Results section, the question should be answered no. All primary outcomes should be described for yes.	1 - Yes 0 - No 0 - UTD
3	Are the characteristics of the patients included in the study clearly described? In cohort studies and trials, inclusion and/or exclusion criteria should be given. In case-control studies, a case-definition and the source for controls should be given.	1 - Yes 0 - No 0 - UTD
4	Are the interventions of interest clearly described? Treatments and placebo (where relevant) that are to be compared should be clearly described.	1 - Yes 0 - No 0 - UTD
5	Are the distributions of principal confounders in each group of subjects to be compared clearly described? A list of principal confounders is provided.	1 - Yes 0 - No 0 - UTD
6	Are the main findings of the study clearly described? Simple outcome data (including denominators and numerators) should be reported for all major findings so that the reader can check the major analyses and conclusions.	1 - Yes 0 - No 0 - UTD
7	Does the study provide estimates of the random variability in the data for the main outcomes? In non-normally distributed data the inter-quartile range of results should be reported. In normally distributed data the standard error, standard deviation or confidence intervals should be reported.	
8	Have all important adverse events that may be a consequence of the intervention been reported? This should be answered yes if the study demonstrates that there was a comprehensive attempt to measure adverse events.	1 - Yes 0 - No 0 - UTD

1 - Yes Have the characteristics of patients lost to follow-up been described? If not explicit = no. If not described = unable to 0 - No determine; if not explicit re: numbers agreeing to participate 0 - UTD = no. 10 Have actual probability values been reported (e.g. 0.035 1 - Yes rather than <0.05) for the main outcomes except where the 0 - No probability value is less than 0.001? 0 - UTD 11 Were the subjects asked to participate in the study 1 - Yes representative of the entire population from which they were 0 - No recruited? The study must identify the source population for 0 - UTD patients and describe how they were selected. 12 Were those subjects who were prepared to participate 1 - Yes representative of the entire population from which they were 0 - No recruited? The proportion of those asked who agreed 0-UTD should be stated. Were the staff, places, and facilities where the patients were 1 - Yes treated, representative of the treatment the majority of 0-No patients receive? For the question to be answered yes the 0 - UTD study should demonstrate that the intervention was representative of that in use in the source population. 14 Was an attempt made to blind those measuring the main 1 - Yes outcomes of the intervention? Must be explicit. 0 - No 0 - UTD If any of the results of the study were based on "data 15 dredging", was this made clear? Any analyses that had not 0 - No been planned at the outset of the study should be clearly 0 - UTD indicated. Retrospective = no. Prospective = yes. In trials and cohort studies, do the analyses adjust for 1 - Yes different lengths of follow-up of patients, or in case- control 0 - No studies, is the time period between the intervention and 0-UTD outcome the same for cases and controls? Where follow-up was the same for all study patients the answer should yes. Studies where differences in follow-up are ignored should be answered no. Acceptable range 1 year follow-up = 1 month each way; 2 years follow-up = 2 months; 3 years follow-up = 3months; 10 years follow-up = 10 months. 17 Were the statistical tests used to assess the main outcomes 1 - Yes appropriate? The statistical techniques used must be 0 - No

appropriate to the data. If no tests done, but would have 0 - UTD

been appropriate to do = no.

1 - Yes Was compliance with the intervention/s reliable? Where there was non-compliance with the allocated treatment or 0 - No where there was contamination of one group, the guestion 0 - UTD should be answered no. Were the main outcome measures used accurate (valid and 1 - Yes reliable)? Where outcome measures are clearly described. 0 - No which refer to other work or that demonstrates the outcome 0 - UTD measures are accurate = yes. All primary outcomes valid and reliable for yes. 20 Were the patients in different intervention groups (trials and 1 - Yes cohort studies) or were the cases and controls (case-control 0 - No studies) recruited from the same population? The question 0 - UTD should be answered unable to determine for cohort and case control studies where there is no information concerning the source of patients. 21 Were study subjects in different intervention groups (trials 1 - Yes and cohort studies) or were the cases and controls (case-0 - No control studies) recruited over the same time? For a study 0 - UTD which does not specify the time period over which patients were recruited, the question should be answered as unable to determine. 22 Were study subjects randomised to intervention groups? 1 - Yes Studies which state that subjects were randomised should 0 - No be answered yes except where method of randomisation 0 - UTD would not ensure random allocation. 23 Was there adequate adjustment for confounding in the 1 - Yes analyses from which the main findings were drawn? In 0 - No nonrandomised studies if the effect of the main confounders 0 - UTD was not investigated or no adjustment was made in the final analyses the question should be answered as no. If no significant difference between groups shown then yes. 24 Were losses of patients to follow-up taken into account? If the numbers of patients lost to follow-up are not reported = 0 - No 0 - UTD unable to determine.

1 - Yes

0 - UTD

0 - No

Did the study have sufficient power to detect a clinically

important effect where the probability value for a difference

being due to chance <5%.

25

Appendix B

Ratings of studies using Downs and Black (1998) adapted quality rating checklist

Total score /28	Study	Checklist questions																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
17	Barbosa et al. (2013)	1	1	1	1	1	1	1	0	0	1	1	0	1	0	1	1	1	0	1	1	1	0	0	1	0
15	Brady et al. (2009)	1	1	1	1	1	1	1	0	0	1	1	0	1	0	1	0	1	1	1	0	0	0	0	1	0
17	Cohen- Katz et al. (2005)	1	1	1	1	1	1	1	0	0	1	1	0	1	0	1	0	1	0	1	1	1	1	0	1	0
22	De Vibe et al. (2013)	1	1	1	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
18	Flook et al. (2013)	1	1	1	1	1	1	1	0	0	1	1	0	1	0	1	0	1	0	1	1	1	1	1	1	0
14	Fortney et al. (2013)	1	1	1	1	1	1	1	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	1	0

Total score /28	Study	Checklist questions																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
11	Galantino et al. (2005)	1	1	0	1	0	1	1	0	0	1	0	0	1	0	1	0	1	0	1	0	0	0	0	1	0
12	Goodman & Schorling (2012)	1	1	1	1	0	1	1	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	0	0
13	Krasner et al. (2009)	1	1	1	1	0	1	1	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	0	1
15	Mackenzie et al. (2006)	1	1	1	1	1	1	1	0	0	1	0	0	1	0	1	0	1	0	0	1	1	1	0	1	0
19	Martin- Asuero et al. (2014)	1	1	1	1	1	1	1	0	0	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	0
17	Moody et al. (2013)	1	1	1	1	1	1	0	1	0	0	1	0	1	0	1	0	1	1	1	1	1	1	1	0	0
15	Poulin et al. (2008)	1	1	1	1	1	1	1	0	0	0	0	0	1	0	1	0	1	0	1	1	1	0	1	1	0
16	Shapiro et al. (2005)	1	1	1	1	0	1	0	0	0	1	1	0	1	0	1	0	1	0	1	1	1	1	1	1	0

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Part Two: Research Study
An interpretative phenomenological analysis of primary school teachers' experiences of attending a mindfulness group

Abstract

Objective

Occupational stress for teachers is on the increase and has a detrimental impact upon both their physical and psychological wellbeing. Many teachers report feeling emotionally exhausted by their job leading to a sense of disconnection from their colleagues and pupils. In turn this disconnection can limit their ability to promote child wellbeing within the school environment, a role increasingly expected of them. Mindfulness groups are currently being used in a number of schools to try to help reduce teacher stress. However an understanding of the experience of teachers attending such groups is lacking, particularly in relation to the possible impact mindfulness may have upon their professional identity and values. This study therefore qualitatively explores teachers' experiences of attending such a group.

Method

Eleven primary school teachers who had attended a mindfulness group participated in semi-structured interviews. Transcripts were analysed using Interpretative Phenomenological Analysis.

Results

Three superordinate themes emerged: "engulfment", "the school family", and "tensions". The "engulfment" theme included the sub-themes: "invasion" and "overdrive" while the sub-themes within "the school family" were: "the teacher parent" and "out of tune and re-attuned". The "tensions" theme comprised the sub-themes: "group acceptance versus self-acceptance", "being versus doing", and "tipping the balance".

Conclusions

There were a number of complex challenges and rewards for the participants' attending the mindfulness group. A sense of engulfment and invasion by work demands was identified, with participants responding to this by working in overdrive. The mindfulness group however provided participants the opportunity to create boundaries between their professional role and personal self, and reengage with their values of pastoral care and connection with pupils. However, a number of tensions and challenges were provoked. Future research investigating the longer-term impact of such interventions on teacher identity and stress is recommended.

Practitioner Points:

- Attending work-based mindfulness groups can contribute to increased selfawareness and self-care for teachers, promoting greater capacity to attune to pupils' emotional needs.
- It may be beneficial for providers of work-based mindfulness interventions to routinely screen participants, to clarify expectations and identify potential clinical vulnerabilities.
- Recognition of the barriers to staff in participating in mindfulness
 interventions within pressurised work systems is vital. To address these
 challenges, groups need to be supported at an organisational level.

Introduction

Occupational stress and burnout are prevalent within the helping-professions (Bruce, Conaglen & Conaglen, 2005). Indeed, one helping-profession that has shown a continued rise in occupational stress is teaching (Teacher Support Network, 2009). The high level of occupational stress reported by teachers is understood to have multiple causes including time demands, negative pupil behaviour, pressure to hit targets, organizational change, and diminishing resources (Flook, Goldberg, Pinger, Bonus, & Davidson, 2013). Jennings and Greenberg (2009) reflect that as classroom climates deteriorate and the demands for teachers escalate there is a danger within the profession of a "burnout cascade" (p.492).

The implications of chronic occupational stress are potentially damaging in a number of ways. For example, the impact upon teachers' wellbeing can lead to emotional exhaustion, reduced motivation, and ultimately problems such as burnout and depression (Tyssen, Vaglum, Gronvold, & Eckberg, 2001). Difficulties at an organisational level can then follow through increased absenteeism, increased job turnover, and low staff morale (Raftopoulos, Charalambous, & Talias, 2012). Teachers working under such conditions are also more likely to respond to their pupils in a negative, and at times hostile manner (Jennings, Snowberg, Coccia, & Greenberg, 2011). Such responses can lead to poorer academic and social outcomes for children, and can detrimentally affect their emotional health (Roffey, 2012). This is concerning because over the past decade there has been a rise in the prevalence of mental health difficulties for children and adolescents (Young Minds, 2009), alongside an increased expectation on teachers

to promote children's psychological resilience (Salter-Jones, 2012). For example, the National Institute for Health and Care Excellence (NICE, 2008) recommends that teachers play central roles in promoting children's emotional wellbeing. However, as many teachers are reporting increased psychological difficulties themselves, this can then impact upon their ability to meet these expectations (Meiklejohn et al., 2012). Thus at a time when child and adolescent mental health is in apparent decline, the teachers expected to support them are also facing their own challenges which will likely hinder their ability to do this. In order to mitigate these combined challenges, there is a clear need for guidance as to how best to support teachers (Jennings et al., 2011). However, there is a relative paucity of research into those interventions to promote emotional wellbeing and reduce stress in this population (Meiklejohn et al., 2012).

Historically work-based stress reduction interventions have been classified as primary, secondary, or tertiary (Richardson & Rothstein, 2008). Primary interventions attempt to alter the sources of stress at work most notably through redesigning the job itself (Bond & Bunce, 2001). Secondary interventions aim to reduce the severity of stress symptoms before they lead to serious health problems through teaching and enabling individuals to "better" cope with these symptoms (Murphy & Sauter, 2003). Tertiary interventions provide employee assistance programmes which treat employee's health conditions through free and confidential access to health-care professionals (Arthur, 2000). Richardson and Rothstein (2008) argue that secondary interventions are the most frequently used within work-settings. Secondary interventions that have been successfully used to target teacher stress and burnout include: cognitive-behavioural approaches (Cecil &

Forman, 1990), and relaxation training (Tunnecliffe, Leach, & Tunicliffe, 1986). However, a secondary intervention that has recently shown promising results for reducing teachers stress is mindfulness (Flook et al., 2013; Singh, Lancioni, Winton, Karazsia, & Singh, 2013). Mindfulness incorporates meditation, curious-enquiry, and self-reflection (Burke, 2009). Kabat-Zinn (1994) describe mindfulness as: "the awareness that emerges through paying attention on purpose, in the present moment, and non-judgementally to the unfolding of experience" (p.4). More recently mindfulness has been operationalised as a psychological construct with Bishop at al. (2004) presenting a two-component definition, involving self-regulation of attention, and orientation to experience. The first component allows the individual to regulate and maintain their attention on immediate experiences, allowing increased recognition of mental processes in the present. The second component involves the individual adopting an orientation towards this experience, characterised by values such as non-doing and acceptance.

Originally deriving from Buddhist traditions, the introduction of mindfulness into clinical settings is attributed to the work of Kabat-Zinn (1994) and the Mindfulness-Based-Stress-Reduction programme (MBSR). Although aspects of mindfulness have been used in many therapies, it is MBSR and the related Mindfulness-Based-Cognitive-Therapy (MBCT; Teasdale, Segal, & Williams, 1995) that most closely incorporate its core values (Burke, 2009).

There is growing evidence for the effectiveness of mindfulness within many clinical populations, for example in the treatment of depression (Segal, Teasdale, & Williams, 2002), and anxiety (Kabat-Zinn, 1994). Mindfulness is also increasingly being used to address occupational stress. In particular two studies have

measured the effectiveness of eight-week work-based mindfulness interventions for reducing stress, and improving wellbeing in groups of American and British primary school teachers (Flook et al., 2013; Gold et al., 2010). The results from these studies have been promising, showing significant improvements in the teachers' anxiety, depression, and stress scores. Meiklejohn et al. (2012) also reviewed three mindfulness programmes provided for teachers: Mindfulness-Based Wellness Education (MBWE; Poulin, Mackenzie, Soloway, & Karayolas, 2008); Cultivating Awareness and Resilience in Education (CARE; Jennings et al., 2011); and the Stress Management and Relaxation Techniques in Education programme (SMART; Jennings, 2011). The findings from these three studies showed some promising outcomes in relation to mindfulness improving teachers' wellbeing and perceived teaching self-efficacy. These studies also demonstrated how mindfulness practice provided for teachers can start to have a positive impact upon their pupils' school experience. For example teachers reported an increased capacity to manage classroom behaviour, provide better support for children, and an ability to build stronger relationships with colleagues and pupils (Jennings et al., 2011; Jennings, 2011; Poulin et al., 2008).

Whilst there is some research into quantitative outcome data for mindfulness groups, there is a paucity of qualitative research into the experiences of both clinical and non-clinical participants attending such groups. The qualitative research into clinical participants who have attended mindfulness groups is summarised by Malpass et al. (2012) who brought together perspectives from fourteen studies to construct a narrative about these experiences. Malpass et al. (2012) found that clinical populations reported that difficulties such as depression,

and anxiety were targeted, and helped by a combination of mindfulness practices and attitudes (e.g., learning to face difficult feelings, acceptance, taking a different relationship to experience). The Malpass et al., (2012) review also reflected how many participants experienced a positive transformation in how they related to themselves, and most notably their "illness identity". This included a reflection that participants became less immersed in this aspect of their identity and experienced a feeling of becoming "bigger" than it, thus allowing space for other aspects of themselves. Indeed, this shift in relationship to the experience of the "illness identity" has been proposed to have a major role in the effectiveness of mindfulness for such populations (Chadwick, Newell & Skinner, 2008). The impact that attending a mindfulness group may have upon identity however may not only be important for clinical populations; it may also be important for non-clinical groups too. This could include those people who attend mindfulness groups to reduce stress within their work context (e.g., teachers). Indeed, if one is to consider that teaching is often referred to as a vocation (Coldron & Smith, 1999), involving a great deal of emotional investment and meaning attached to the role (Beijaard, 1995), then exploration into whether and how mindfulness may impact upon teachers' sense of "professional identity" is worth exploring.

There has been a preliminary study by Singh et al. (2013), who employed Interpretative Phenomenological Analysis to explore the experiences of three preschool teachers in specialist learning disability education in the United States, who had attended a mindfulness group. This study found that the mindfulness practices impacted upon the teachers' sense of personal self and professional role in a favourable way, and improved their relationships with their pupils. The teachers

also found the mindfulness practices easy and were able to continue practicing at home, despite time pressures. However, although this study starts to add to our understanding in this area, it is important to note that it had a number of limitations. Firstly, it only focussed on a very small and specific group (e.g., three teachers in learning disability education in the United States), thus limiting transferability. Secondly, it only presents a very brief and narrow description of the methodology and analysis used. Thirdly, it does not provide any clear reference to whether (if any) quality checks for qualitative research were employed. Finally, this study only presents a limited discussion and exploration of the emergent findings.

Summary

Research has started to give a voice to people attending mindfulness groups. However, more qualitative studies in this area are needed to develop a better knowledge of the experiences of participants attending such groups, and to increase the understanding of any mechanisms of change that take place (Allen, Bromley, Kuyken & Sonnenberg, 2009). While the study by Singh et al. (2013), offers an initial contribution to our understanding of the experience of teachers attending mindfulness groups, it has a number of methodological limitations and a cultural specificity. This limits the transferability of the findings to teachers working in British mainstream education. The present study will therefore attempt to address these limitations by undertaking a more detailed qualitative analysis of British primary school teachers attending a mindfulness group. Its aim is to add insight into the possible psychological processes that may occur for teachers experiencing mindfulness in the context of their work setting, and in particular any impact this may have upon their sense of professional identity. By studying British

teachers the findings aim to be more transferable to UK teaching populations, especially with respect to current health, social, economic, and political contexts.

Aim

To use Interpretative Phenomenological Analysis to explore the experiences of primary school teachers who attended a work-based mindfulness group.

Primary questions

- What does it mean to primary school teachers to experience a mindfulness group in a work setting?
- Does attending the mindfulness group have any impact upon the teachers' sense of professional identity?

Methodology

Design

In response to the paucity of qualitative research in this area, and to be consistent with the aims of the study, Interpretative Phenomenological Analysis (IPA; Smith, Flowers, & Larkin, 2009) was employed. IPA is relevant when exploring the experiences of attending a mindfulness group, because both IPA and mindfulness view participants as playing active roles in the construction of experiences (Segal et al., 2002). IPA is a phenomenological approach with a particular psychological interest in the meaning and sense that people make of their experience (Larkin & Thompson, 2012)

Alongside phenomenology and ideography, the philosophical foundations of IPA are underpinned by hermeneutics (Smith, 2008). Hermeneutics is the theory of interpretation, and an important tenet within the IPA research process is the understanding of the role of "double hermeneutics" (Smith & Eatough, 2006).

Double hermeneutics acknowledges how the researcher is attempting to make sense of a participant's experience, whilst the participant is concurrently trying to understand this experience (Smith & Osborn, 2008). IPA research is dynamic, and although the purpose is to try and understand the participant's world, it is recognised that the researchers own experience will impact interpretation (Smith et al., 2009). In response to this the researcher endeavours to "bracket off" their own experience from the phenomenon being investigated, in order to focus primarily upon what is actually present in the data (Husserl, 1962). However, it is acknowledged that complete bracketing is unachievable, so the researcher is encouraged to continuously reflect throughout the research process (Smith et al., 2009).

Recruitment

A purposive sample was recruited from a group of primary school teachers who had attended an eight-session mindfulness group run at their school during the summer term 2014. This school was located in a city in the North of England. Within this school 16 teachers attended the group. The researcher visited the school after the group had finished and all attendees were given an information sheet about the study (Appendix C). Potential participants were invited to contact the researcher through e-mail or the telephone number provided on the information sheet.

Participants

All teachers (n = 16) who attended the group were given the opportunity to participate in the study. Participants were required to speak fluent English. Eleven teachers agreed to participate in the study, nine females and two males, and were

interviewed at the school in September 2014. Participants were aged 23 to 49 years (mean n = 36) and had been working as qualified teachers for between two and 26 years (mean n = 11). Participants attended between six and eight sessions of the group (mean n = 7). A more detailed summary of participant characteristics is presented in Table.1. As all the participants were colleagues, some data has either been excluded (e.g., gender), or presented as a range (e.g., age) in order to ensure anonymity. In addition, all participants' names are gender neutral pseudonyms, and for this purpose throughout the study they are either referred to using these names, or as "she" when appropriate.

A separate quantitative evaluation of the mindfulness course was undertaken by the project supervisors (LE and GR). Descriptive data collected pre-intervention from the Teacher Stress Inventory (TSI; Fimian & Fastenau, 1990) is included in this study, to help locate the stress levels of participants within the wider population of teachers. The TSI is a self-report questionnaire with 49 items (Appendix D). Each item is rated on a Five-point Likert scale with a score of one indicating no stress, two indicating mild stress, three indicating medium stress, four indicating great stress, and five indicating major stress. After each item has been scored an overall mean score of between one and five for each teacher is calculated. A mean score of 1.90 or lower indicates a significantly weak level of stress present for the teacher. A score of between 1.91 and 3.28 indicates a moderate level of stress is present. A score of 3.29 or above indicates a significantly strong level of stress present. The normative scores for the TSI suggest a teacher with average stress levels is expected to score between 2.00 and 3.25. A mean score of 1.99 or less represents a significantly lower than

average level of stress present. A score of 3.26 or above indicates a significantly higher level of stress present. The TSI was validated on American teachers (n = 3,401) in regular education (n = 962), and special education (n = 2,352) settings. The TSI has good internal consistency Cronbach's alpha = .93, and acceptable test-retest reliability = .76 (p = .001).

Table 1. Participant demographics

Name (pseudonym)	Age (Years)	Length of time in teaching (Years)	Mindfulness sessions attended	TSI score pre- intervention	TSI stress level pre-intervention	TSI stress level pre-intervention in relation to normative score for primary school teachers
Alex	20-29	2-5	8	3.16	Moderate	Average
Ashley	30-39	16-20	8	1.84	Significantly Weak	Significantly Lower
Charlie	40-49	21-25	8	2.46	Moderate	Average
Chris	40-49	16-20	6	1.57	Significantly Weak	Significantly Lower
Fran	20-29	2-5	8	2.44	Moderate	Average
Jamie	20-29	2-5	8	2.08	Moderate	Average
Jo	30-39	6-10	8	2.36	Moderate	Average
Lou	30-39	2-5	7	2,42	Moderate	Average
Pat	40-49	16-20	7	2.17	Moderate	Average
Sam	40-49	26-30	7	2.10	Moderate	Average
Vic	20-29	2-5	7	2.89	Moderate	Average

Mindfulness protocol

The mindfulness intervention group consisted of 8 x 30 minute sessions provided over six weeks. The group was facilitated by an experienced mindfulness practitioner and trainer. The programme included key elements of the original MBSR model but was adapted to meet the teachers' time demands. These elements included: psycho-education (e.g., identifying stress), practical exercises (e.g., mindful-movement), and home practices. The brief course promoted the key

values at the core of the MBSR model (e.g., acceptance). For an overview of the schedule (see Appendix E).

Data-collection and Interview Schedule

Semi-structured interviews were conducted and the interview schedule (Figure. 1) was designed to help encourage rapport with the participant and encompass the research aims (Smith et al., 2009). Two pilot interviews were conducted with peer trainee clinical psychologists. The pilot interviews enabled the researcher to evaluate the procedure and become familiar with the schedule. All interviews were conducted in a private office on the school premises and lasted between 25 and 50 minutes (mean n = 40 mins). Prior to the commencement of the interview participants were given time to familiarise themselves with the information sheet and confidentiality boundaries of the study. Each participant provided informed consent (Appendix F). At the beginning of the interview relevant demographic information was collected. All interviews were recorded using an encrypted digital recorder, and transcription was undertaken by a university approved transcriber. The transcriber signed a confidentiality agreement declaring that data-protection legislation would be followed (Appendix G).

Figure 1: interview schedule (For full schedule see Appendix H).

- 1. Based on your experience, what does mindfulness mean to you?
- **2.** Can tell me what you remember about the experience of attending the mindfulness group?

- **3.** During the time of attending the mindfulness group and doing the homework practices, did this have any impact upon you? If so, in what ways?
- **4.** What has been your experience of practising mindfulness since finishing the group?
- **5.** Over the past few months did you experience any changes as a result of attending the mindfulness group?
- **6.** How do you feel the mindfulness group and practices fitted with the values you held before attending the group?

Optional prompts: What did that mean to you? Can you tell me more about that? What did you understand by that?

Analysis

The analysis was an iterative process following guidance provided by Smith et al. (2009). The initial stage involved the researcher becoming immersed in the original data by listening to all the interviews and reading and re-reading the transcripts (Smith et al., 2009). During this process the researcher recorded unfocussed notes detailing thoughts and feelings that arose. These notes were kept and used to inform interpretation.

The researcher then examined the semantic content and language at a more descriptive and exploratory level for each participant. This involved line-by-line coding of the transcripts and identification of key words, meanings, and events (Smith et al., 2009). Running concurrently with this process, the researcher recorded interpretative coding. This detailed coding process enabled the main characteristics and themes within each interview to emerge. The emergent themes

were recorded in the left hand margin, and subsequently in a table, to allow crosssectional comparisons to be made (Larkin & Thompson, 2012).

This process was repeated for each transcript. During this phase the analytic process moved to a more theoretical level, as the researcher then compared individual accounts across the sample. This included exploring similarities and differences between participants. As part of the IPA process the analysis shifted from the more descriptive to a deeper interpretative position.

Quality control and reflexivity

Stiles (1993) states that experiences reported in qualitative research are perceived differently from different viewpoints. Thus, applying the criteria of reliability to such studies is inappropriate (Yardley, 2008). However, qualitative research still needs to demonstrate rigour (Smith, 2008). To enhance the quality of the present study the seven quality standards developed by Elliott, Fisher and Rennie (1999) were employed.

In acknowledgement of the hermeneutic nature of IPA, reflexivity within this study was considered paramount (Smith, 2008). Reflexivity and "owning one's perspective" was addressed in a number of ways. Throughout the research process a reflexive diary was maintained and referred to (see Appendix J for an example). The reflections that emerged in this process were subsequently discussed in research supervision and with a peer IPA researcher, thus enabling some level of "bracketing off" of personal experience (Yardley, 2008). The standard of "situating the sample" was met through the collection of relevant demographic and psychometric details. This was to allow the reader to judge whether the findings presented are realistic to their wider context. To meet the

"grounding in examples" standard the researcher presented a number of extracts from the transcripts, and examples of themes (Whittermore, Chase, &, Mandle, 2001). To enhance the credibility of the study, "credibility checks" of the analysis were undertaken within research supervision, and peer audit. This included one of the research supervisors (experienced in IPA research) completing an independent audit of two anonymised transcripts and themes. A peer IPA researcher also audited a further two transcripts. To ensure an appropriate level of "coherence" within the study, the researcher aimed to present a palatable number of themes in a manner to aid understanding of the participants' lived experience. The "general versus specific" standard was addressed by ensuring that the interpretations were based on an appropriate number of examples. The researcher also acknowledged the limitations to the level of applicability from the findings of this study to other contexts (Elliott et al., 1999). Finally, the study aimed to "resonate with readers" by presenting the experiences of participants in a manner that represented the meaning in the data in the most "economical" and "evocative" way (Larkin & Thompson, 2012, p.111).

Ethical considerations

Ethical approval was gained from the University of Sheffield Ethics

Committee (Appendix I). The researcher ensured participants were able to give informed consent by providing them with appropriate information to consider what participation would require. Participants were informed that all data collected would be stored confidentially, any identifying information would be removed, and a pseudonym would be used during write-up and dissemination.

Personal statement

The researcher was a white British male in his mid-thirties and in the third year of clinical psychology training. The researcher previously worked for 10 years in a Child and Adolescent Mental Health Service. This was as a Social Worker and latterly as a Cognitive Behavioural Therapist. During this time the researcher used mindfulness as an intervention with clients and colleagues to promote wellbeing. The researcher has practiced mindfulness for a decade. These experiences may have led to assumptions by the researcher of having some a priori understanding of participant experience of attending the group. The researcher had no connection with the school where the research took place, and no connection with the development of the group or the practitioner who led it.

Results

Three superordinate themes and seven sub-ordinate themes emerged during analysis (Table 2).

Table 2. Emergent themes

Superordinate themes	Subordinate Themes
1. Engulfment	1.1. Invasion 1.2. Overdrive
2. The school family	2.1. The parent teacher2.2. Out of tune and re-attuned
3. Tensions	3.1. Group acceptance versus self-acceptance3.2. Doing versus being3.3. Tipping the balance

1. Engulfment

The engulfment theme reflects the participants' awareness of the immersive and overwhelming nature of their job. This awareness was facilitated though attendance of the mindfulness group, which promoted reflection upon the relentless demands placed upon them as teachers, and the lack of boundaries that were in place to help them deal with this. The mechanism which the majority of participants reported using to cope in this environment is referred to as "overdrive", which was shown to be an equally engulfing process keeping many participants trapped in a stress cycle.

1.1. Invasion

All participants described how during the mindfulness group they started to reflect upon how their job was highly pressurised, unpredictable, and lacking boundaries. The overriding impression was that they were trying to work in a challenging environment with little space or respite to protect them from relentless demands:

"When the parents and the children start coming in, it's 'we need to do this and have you done that?' You're constantly bombarded." (Pat)

"... it feels like you're always in a battle." (Lou)

Alex reported that after she attended the mindfulness group, and despite her best intentions to practice at work, opportunities were limited. She described how she had to physically put in a boundary and hide for a few minutes during one school day to ensure she had some space.

"I found myself sitting in my cupboard the other day with the door shut, if you're in your classroom someone will walk in and want you; there's no space." (Alex)

A number of participants reflected that even boundaries such as lunchtime would be intruded upon. For example the sense of eating mindfully, was a novel idea when eating was regularly seen as a luxury as opposed to a basic need. Indeed a number of participants reflected that if lunch was eaten, it was whilst doing work. Basic self-care needs seemed undervalued by nearly all the participants particularly in comparison to doing "jobs":

"When you're in the classroom you're constantly rushing around; if I do eat my dinner, it's whilst doing another job, walking around the classroom".

(Jamie)

The majority of the participants described how work invaded evenings and weekends, and boundaries between work and home were blurred. Alex suggested that "working over" was the norm. All participants seemed to be accepting that work intruding upon home life was just part of the job (at least prior to the mindfulness group) and did not question this:

"I do a lot of work at home, I go home and the evening consists of working, having tea, and bed." (Charlie)

However, a number of participants described how their job had started to intrude into their life to such an extent, that even when they tried, they couldn't switch off. It appeared that the stress that had been present all day would residually continue throughout the evening, often affecting sleep:

"I'm good at going home and carrying the same worries all through home."

(Fran)

"Often you've worried all night and been awake all night". (Pat)

1.2. Overdrive

In contrast to their experience of the "stillness" (Lou) in the mindfulness group, the majority of participants reported that the primary mechanism within the school to manage the job was to "keep going" and "do more work" (Jamie).

There was an anxiety implied by many participants that if they did not keep going, or stay in the doing mode, they would become overwhelmed by the workload. The combination of the stressful environment and fear of being

engulfed, led to many participants functioning in a prolonged state of hyperarousal:

"I feel like I'm on like overdrive so much of my time, I'm just on the go and on the go." (Alex)

For many participants there was a sense that they felt trapped in overdrive, because no matter what they did "it would never be enough" (Charlie). The overdrive appeared to be maintained not just by the ceaseless demands of the work itself, but also through some of the participants' relationship with, and response to, these demands.

Jamie reported that when she was feeling stressed she would become preoccupied with completing all her tasks, even if this was impossible. This was
understood as being rather like an intrusive thought. She appeared to bargain with
herself, that relaxation was only allowed when everything was finished, even if she
became exhausted.

"I'm always thinking about the things I need to do. I can never relax until I've got those things done." (Jamie)

Alex acknowledged that her response to the stress she felt at work tapped into her perfectionistic traits; not only did she want to complete the impossible list of jobs, but they needed to be "perfect". For her, like many of the teachers, the sense of doing a good enough job seemed difficult to judge as "nothing could ever be truly complete" (Lou). This meant little energy was left for other needs:

"My priority was being perfect at work and that was at the expense of everything else." (Alex)

2. The school family

This superordinate theme reflects a sense that participants valued the role of supporting the children's emotional wellbeing. There was an awareness of the importance of providing the children with a positive attachment figure and secure base, as many lacked this at home. This was shown with the identification of school as a "family" and the teaching role being almost parental. The experience of the mindfulness group encouraged a number of the participants to reflect upon how they had become "distanced" from this valued aspect of their job. However, through the reflective and psycho-educative mindfulness practice they were able to consider why this was the case, enabling positive changes.

2.1. The teacher parent

The majority of the participant accounts reflected a feeling of closeness felt towards colleagues and pupils. Pat reported that she felt a sense of safety and shared identity within the relationships at school, suggesting it felt akin to a "close knit" community. Chris reflected that within this school community there was such a sense of familiarity with colleagues that relationships often transcended the boundary between the professional and personal. For Chris, this included knowing "all about" people's lives and a connection on an existential level:

"You know people very well, you know all about their lives, you know who they are." (Chris)

This sense of connection for those within the school community was experienced by Jo as being a "family". She reflected upon the positive connotations of having this strong attachment and connection with colleagues, acknowledging how it gave her support and sense of belonging:

"At school we are a family, and I think the more people that can be around you, and understand you, and support you, it makes life easier." (Jo)

A number of participants described a strong sense of attachment towards the children in the school. This was reflected through the almost parental duty and responsibility that they felt towards them. Indeed, a number of participants referred to pupils as "my children", or "our children".

For Chris an explicit parallel between being a parent and a teacher was drawn, particularly in relation to altruistically prioritising the child's needs over her own:

"As a teacher, and parent, you end up at the bottom all the time, so you find ways to manage that." (Chris)

Lou, also described that although teaching was a paid job, her primary driver for being in the profession was related more to the "care" and attachment she felt towards the children:

"I don't care whether I get my pay increase each year... I think it's because we care about the children we are teaching." (Lou)

Jo was concerned that many children may not have their emotional needs met at home. There was a sense that she valued the opportunity to address this by providing them with a loving environment. The use of the word "love" was illustrative of how participants perceived their role as providing a secure base for the children:

"... a lot of our kids need a lot more love than they get at home. It needs to be about the whole child here." (Jo)

The belief that teaching needed to be about the "whole child" and more than just "the 3 R's" was echoed by all participants. Jamie reflected that the other adults in the children's lives may not always provide positive role models. She hoped to be a positive role model for the children, helping them vicariously learn positive narratives of behaviour and relating:

"The amount of times they've seen adults not being very positive in their home, especially a lot of parents at this school, being positive is one of the main things I try and be in my lessons." (Jamie)

Sam reflected upon the importance of the teacher in helping the children develop their interpersonal skills to become "better" people. The use of the word "amazing" highlighted the strong emotional connection she had with the children and the almost parental pride she would feel in contributing to this:

"If they could leave being able to interact with somebody better, or just something that made them a better person that would be amazing." (Sam)

2.2. Out of tune and re-attuned

The majority of the participants reported that attending the mindfulness group helped them reflect how their behaviour and stress often limited their capacity to support the children's wellbeing.

Lou reported that the group helped her realise that she had become estranged from the aspects of teaching that were important to her. There was a sense that she started to notice how she was behaving incongruently:

"I wasn't good at delivering my values, so I think by being more aware of that, I could see that certain behaviours didn't match those values." (Lou) The psycho-educative aspect of the mindfulness group seemed to help many participants notice, and then understand why, they may behave in a way incongruent to their values. Ashley reported that during an early mindfulness session she was surprised how much she was struggling at work. She reported that in completing a "stress cycle" sheet she became aware of how often her own emotions could become uncontained. This helped her make sense of how she could be pulled into conflict by "automatically reacting" to events, a response that was not helpful for her, or the children.

Sam reported becoming aware of a connection between her own elevated stress levels and her often uncontained and reactive responses. She started to notice she was dealing with situations almost like a child herself "jumping in with two feet" (Sam).

Pat started to notice how the teachers and children would get into stress cycles "winding each other up". She also reported that she was able to start applying mindfulness principles such as "not reacting" during these situations. This showed an improved ability for her to take a less attacking/defensive position, enabling her to be the containing adult that she wanted to be, and that the children needed:

"When you've done mindfulness it lets you like put the brakes on, step back for a minute, so you're not exacerbating any flare up of emotion." (Pat)

There was a sense for a number of participants through attuning to their own stress levels and reactions, they were more able to attune to the children. For Ashley, this again meant she was able to remain more contained in emotional situations, feeling less under personal attack:

"(...) at the end of the day, that person who is shouting is just stressed. They don't want to kill me, it's about not taking it personally." (Ashley)

Lou reported becoming more empathic towards the children who were challenging. This seemed to help her notice that the children who often need emotional support may appear rejecting, or express their need in a way that makes caring difficult:

"We do have children who have really difficult lives, and that displays itself in school in a lot of bad behaviour, but there's some unfortunate circumstances leading to that." (Lou)

Charlie reported starting to see more depth to the children's behaviour. She reported becoming less labelling of the child as "bad" allowing her to hold a more flexible narrative of that child:

"(Now) if I've seen a child hit another child. That doesn't make them bad. I need to deal with that hitting of another child, not that bad person." (Charlie)

For Lou the mindfulness practice also encouraged her to seek out children who may have been struggling emotionally. It seemed that through becoming more attuned to her emotions, she became more attuned to the children's needs. Lou reflected how she was able to stop difficulties escalating through being more present with the children at all times, not just when they were challenging:

"I've tried to get better at spotting how children might be becoming negative in some way, and trying to intervene, so it doesn't become something bigger." (Lou)

3. Tensions

This superordinate theme reflects the dynamic process of change many participants experienced during the group and beyond. There was a real sense that all participants felt tension between continuing with the usual way of doing things (e.g., overdrive), and the possibility of a different (mindful) way. Those participants who appeared to assimilate the mindfulness values and attitudes the most, appeared to be the ones who were able to find enough reward from this process. However, this tension continued for all participants, because despite individual motivations to continue mindfulness practice, overdrive was still a powerful and consuming presence.

3.1. Group acceptance versus self-acceptance

There was a sense for many participants that the mindfulness values of non-judging and acceptance were alien to their usual experience. In turn, within the group setting without the containment of more concrete certainties, a number of participants reflected that they automatically negatively judged themselves. They struggled to trust that their own experience was okay:

"I was worried about how I was sitting; were my legs right, was I breathing correctly." (Jamie)

"I was worried I wasn't taking as much out of it as I should. I felt I was wrong. I've never experienced anything like that, where it's how you interpret it." (Fran)

Most participants reported that not having the anchor of a right and wrong answer led to them seeking reassurance by "looking outwards" and using other

people as barometers to indicate what was right. There was an overriding sense that for some participants that being different or individual felt wrong:

"I found it difficult to not desperately want to do what everyone else was doing, I would feel like I was doing it wrong." (Alex)

Vic reported looking to find allies and validation from others who may have been struggling with mindfulness as much as she was. She appeared to find this an isolating experience, reporting feeling that "everyone else" was on board:

"Other people seemed to get quite a lot from it – everyone seemed to be on board; they didn't look as distracted as me." (Vic)

Chris reported feeling so overwhelmed by her sense of not experiencing mindfulness properly that she confessed to the rest of the group. She reported how the power of this disclosure for her, felt almost like sharing a guilty or shameful secret:

"I came out and confessed to everybody." (Chris)

However for the majority of the participants as they assimilated the interpretative aspects of the mindfulness practice, there appeared to be a reduction in their pre-occupation with doing it right. This was initially experienced within the group setting before being translated outside the group. A number of participants became less critical in their view of themselves, and more accepting of their own and other people's differences. Through this assimilation of mindfulness values a number of participants started to experience a sense of individuation from the group identity, and more comfort in their own skin:

"I realised they (other people's views) don't matter so much, you take from it whatever you take from it on that session." (Ashley)

"It made me less judgemental, it felt ok to be different to somebody else" (Fran)

3.2. Doing versus being

Despite initially hoping that the mindfulness group could be helpful for reducing stress, nearly all participants described ambivalence about attending. In many ways there was a tension between seeing the group as helpful in principle, and a fear of stepping out of overdrive. For some participants it appeared they were so trapped in the cycle of overdrive that they had to drag themselves away from work. The anxiety at stopping initially manifested itself through feelings of annoyance and resentment towards the group:

"I'd be in the middle of doing a job, so I resented going to it, because I was leaving work I was doing." (Jamie)

However, for many participants this initial anxiety and resentment abated once they became engaged in the mindfulness process. This tension seemed to shift towards the mindfulness group being a positive thing once participants habituated to this way of being:

"I first walked in, I thought I should really be doing so and so, but once I got into it and started relaxing – all that went out the window." (Sam)

However, during the first couple of group sessions some participants did not habituate to stepping out of overdrive. For a couple of participants there was a sense that the overdrive had been protective, as it had shielded them from difficult emotions. For Alex there was a sense that she felt flooded by feelings she had tried to block out. She reported "noticing my body" was so intense that it felt very exposing, and almost physically painful:

"I found doing the body-scan really difficult. I couldn't bear the feeling of noticing my bones – it was nails on a chalkboard, I wonder if it goes back to when I was ill? I try and block that out." (Alex)

Vic was anxious that if she was not distracted from noticing her body, then she may not have been able to "carry on", something that would feel exposing in the work environment:

"If I'm maybe breathing too heavy, I can ignore it and carry on, whereas noticing it is what then makes me panic and makes everything heighten."

(Vic)

For those participants who found the initial sessions very challenging there was a process where they decided to engage or not: For Alex the process of staying engaged seemed to be based on a motivation to "change things", even if this was difficult. The tipping of the decisional balance in favour of her engaging appeared to be related to her belief that difficult emotions could be worked through. It appeared Alex located at least some of the locus of control for any change process within herself. This locus of control and self-efficacy enhanced when she was able to experience some mastery and reward in this practice:

"I felt I was having a difficult reaction to it and I needed to try and work through that, to change things (...) I did more of it and I found that easier – I like that one now'." (Alex)

Vic and Chris who remained unable to engage, reported that they experienced difficult feelings, but were unable to access enough reward to make commitment worthwhile. For both, this was attributed to a sense that they had less agency over whether they could be mindful. They reported that there were people

who could be mindful and those who cannot. Vic and Chris felt that they were people who could not, and understandably were less motivated to "stick with it":

"You've got to be able to put yourself in that place. I think some people are good at doing, I'm not. I could never do it." (Chris)

A number of participants however reflected upon the benefits they attributed to the experience of the mindfulness group. This included a shift in how they were experientially engaging with life. This was considered a positive shift and equated with a sense of connecting with their lives in the present:

"It's like taking time to feel the sun, to smell things, it's made it more of a 3D world." (Ashley)

For Sam, being mindful was again related to having a break from overdrive, and was understood as enabling her to perceive the world more vibrantly. This process seemed to help her connect with feelings of gratitude and elation:

"It's having golden moments and mindfulness is like that. When you're sat, looking at the countryside thinking, "oh this is wonderful." (Sam)

3.3. Tipping the balance

Nearly all participants described a strong sense of responsibility for putting others first. This was expressed by Fran who justified why working through lunch was acceptable:

"Because it's for other people, eating is only going to affect me, it's not going to affect anyone else." (Fran)

However, most participants who managed to engage with the mindfulness group described a process where they started to realise that their life had previously been too balanced in the favour of work. It appeared that before

attending the group a number of participants were within the pre-contemplation stage of change, in the sense they had not consciously realised this. For Jamie, this realisation, and shift to a more contemplative stage manifested as a "lightbulb moment":

"I (sat there and) suddenly thought, 'why am I spending all this time at work and only doing a few things for myself?" (Jamie)

For Lou, there seemed to be a similar change process which encouraged her to readdress her priorities. She reported that the value of stepping out of overdrive and finding more balance in life had taken more precedence:

"I suppose what it showed to me (...) it's important to take time out to do other things." (Lou)

Alex, identified a similar change process and made a more explicit connection between this imbalance and the negative affect it had on her psychological welfare. There was a sense that she had started to value herself more and see her own needs as important:

"... before the group started, what was important to me was work, and now my health and mental wellbeing are important to me." (Alex)

This increased awareness and shift in attitude towards valuing and caring for oneself enabled a number of participants to make changes. Charlie reported noticing the importance of sleep and was motivated to make practical changes:

"I've become more mindful of how uncomfortable my mattress is, it's now an important part of my routine to have good sleep." (Charlie)

One of the major ways in which a number of participants reported that they started to prioritise their wellbeing was by introducing stronger boundaries between

work and home. This enabled a better "separation between their two lives" (Jamie). This included an attitudinal and behavioural change for Ashley, who decided to leave work on time to do the "important things" such as spending time with her family:

"It's making sure that I take time out to be with them. So it will make me leave and do important things first." (Ashley)

Despite the majority of participants experiencing positive changes, only

Charlie (the one participant who had previously practiced mindfulness) had

continued to formally practice. This seemed surprising when many participants felt

doing more formal practice would reap even more benefits.

"I've got so much from so little input, that if I dedicated my time to it, I could get even more." (Lou)

The main reason reported by a number of participants for this dissonance was that similarly to when initially attending the group, formal mindfulness was considered one more task in a busy day. In some respects taking a mindful moment appeared to allow some brief respite from being in overdrive, but dedicating more time felt unachievable.

For Jo there was a sense that finding even a few minutes was too difficult.

The question she asked in a tone of resignation echoed what a number of participants felt:

"Where in my day can it fit, where can I be mindful without it being an additionality?" (Jo)

A number of participants reflected that working in a system that would not slow down, meant a few mindful moments in the day was all they could do:

"I find it difficult to run a house, look after the kids, and do the job, that anything extra, I haven't got time." (Ashley)

Charlie reflected that even with willingness to practice formally, without systemic and societal changes this was challenging:

"I think the pace of life in the 21st century, and the job, makes being mindful difficult." (Charlie).

Discussion

The findings of this study identify a number of important elements in understanding the experiences of teachers attending a work-based mindfulness group. Indeed, the engulfment theme provides some insight into how teacher identity may play a role in the high levels of stress reported within this profession. For all participants the experience of attending the mindfulness group encouraged them to start reflecting upon how stressful and consuming their job felt. This sense that participants felt their individual "self" was engulfed by their environment is concerning. This is because experiencing such challenging working environments is a known predictor of increased stress and burnout (Leiter, Bakker, & Maslach, 2014). It argued that the stress of working in such environments can often be managed, if protective boundaries are in place such as regular breaks (Skovholt & Trotter-Mathison, 2011). Prior to the mindfulness group the teachers' experienced lack of boundaries would indicate that a major protective factor against burnout was lacking (Leiter et al., 2014). The report that one participant even felt she had to "hide in a cupboard" to create some physical space during a working day was reminiscent of the findings of Roeser, Skinner, Beers, and Jennings (2012). These researchers found that amongst the helping-professions teaching was particularly challenging, as teachers are often unable to extricate themselves from stressful situations because they cannot "physically" leave the classroom. In this context the sense that the mindfulness group enabled some of the teachers to begin putting in place boundaries between home and work and around self-care is therefore important. This is because it represents a move towards developing protective factors which could help manage the challenge of the pressured teaching environment.

On one level it appeared many participants played an active role in the blurring of boundaries and feeling of engulfment through decisions such as working during lunch, or at home. However, to refer to this as an active decision does not do justice to the dilemma experienced. Indeed, there was a sense that due to the wider paucity of boundaries the participants did not have the time and space to reflect upon whether there were alternative ways of coping. For many of the participants their experience of work being akin to "battle" (Lou) would help us understand why, previous to attending the group, their focus may have been on survival rather than on change. As previous authors have argued, when individuals are experiencing stressed environments their fight and flight reflex will be activated leading to increased physiological arousal (Gilbert, 2005). This can reduce the capacity to think flexibly and limit possible change or agency in such situations (Gilbert, 2005). In this context attending the mindfulness group appeared to offer participants an opportunity to step back and reflect in a way that had been previously lacking.

The perception that the participants did not seem to have the capacity to consider alternative ways of being at work was understandable on an individual basis (e.g., lack of boundaries). However, Menzies (1960) argues that stress is not just experienced on an individual level, but also experienced by collective systems, with whole organisations developing identities to defend against this. In this sense the school culture of "overdrive" appeared to be mirroring the participants' individual dilemmas. Menzies (1960) argues that these "socially structured" defence mechanisms" are developed through some agreement (consciously or unconsciously) between the members of the group as to what form this should take. Given the finding that participants initially looked to the group to provide guidance on how they themselves should respond, this suggests some influence of collective identity for the teachers. It is also suggested by Menzies that the greater the stress and anxiety in the system, then the greater the need for "re-assurance in rather compulsive repetition". This was modelled by a number of participants in this study, both individually (compulsive thoughts and perfectionism), and as a whole system (repeated "overdrive"). This form of collective defence can, for an organisation that feels constantly under attack (as it does with individuals), become rigid, thus inhibiting the capacity to reflect and implement change (Menzies, 1960).

The school family theme reflected how the mindfulness group facilitated an awareness of how the participants valued the part of their professional role that involved providing a nurturing relationship for the children. This seemed in contrast to the engulfment theme as it represented the more positive and protective characteristics of having more diffuse boundaries between the personal and professional self. However, this theme also reflects how many participants felt

rather distanced from this valued part of their job, and how mindfulness practice enabled re-engagement with it.

The literature focussing on mindfulness for parents provides some insight into how the mindfulness practice may have helped participants re-engage with this "teacher-parent" part of their identity. Bogels, Lehtonnen and Restifo (2010) suggest that the higher the parental stress levels, the poorer the parenting, as parents are hyper-aroused and are more likely to behave as "reactive and controlling" towards the children. They argue that mindfulness not only helps to reduce parental stress but also reduces their attentional bias towards negative behaviour of the children. The report from many participants that through the mindfulness group they were able to respond in a more proactive, sensitive, and mindful way to the children, would hopefully give them a sense of being the "teacher-parent" they valued. This would potentially also have numerous positive connotations for the children (Howes & Hamilton, 1992).

The idea that the participants valued the pastoral and "parental" aspects of their teaching role is consistent with previous research (Chittenden, 1999). Zajac and Kobak (2006) suggest that a pivotal tenet of the teaching role is to provide the pupil with an "ad-hoc attachment figure". This attachment is reciprocated as children have an innate propensity to attach to adults who they spend time with and who care for them, a position often fulfilled by primary school teachers (Bergin & Bergin, 2009). Verschueren and Koomen (2012) suggest that younger and more vulnerable children particularly need to see their teacher as attachment figure as they can lack this outside of school. This comment was echoed by several of the participants. For many of the participants therefore, it seemed important that the

increased self-awareness facilitated by the mindfulness practice enabled them to attune and engage better with the children.

The tensions theme reflects how the experience of mindfulness for the participants was not a straightforward one. It highlights how despite a number of benefits reported, this new way of being created challenges. This theme also reflects how the participant's decision to either engage or disengage with mindfulness, was influenced by how they navigated these challenges. This included a combination of internal factors (e.g., agency) and external factors (e.g., time).

The sense that a number of participants initially struggled with the interpretative aspects of the mindfulness practice has been found in previous studies (Allen et al., 2009). For example, Malpass, et al., (2012) report that many individuals attending mindfulness groups in clinical settings can experience strong feelings of initial "uncertainty" and "anxiety" as mindfulness can feel counterintuitive. As such, the sense that participants tended to initially look towards the rest of the group to try and gain a sense of what was the "right way to be" was understandable. Feldman (1994) reports that in settings where there is a strong group identity, norms are developed that serve as both a means of helping goals to be achieved, and to provide protection from any external threat. Thus, in this scenario mindfulness practice may have been perceived as an external challenge to the safety of the order of things, and thus the group identity may have provided protection. However, the sense that many participants started to recognise a shift towards trusting their own experience more and individuating from

the group identity, was suggestive that they were starting to "look within" as described by Mackenzie, Carlson, Munoz, & Speca (2007).

The mindfulness group with its onus on "being" and "acceptance"" was rather different to the usual experience of a group of people who generally function in, and identify with the "doing mode". Crane, Kuyken, Hastings, Rothwell, and Williams (2010) suggest that mindfulness can act like a "doorway from the doing mode to the being mode" and is pivotal in reducing stress, which was an aim of the group. Yet, for many of the participants there was a sense that taking a step through this "doorway" away from the dominant teaching culture was itself stress inducing. As such, many felt ambivalent, and even resentful towards the group. This could be understood as an example of the participants experiencing "immunity to change" (Roeser et al., 2012). This phenomenon has been found in a number of studies examining why workers in the helping-professions despite consciously reporting that long standing habits of practice need to change, often resist change, even when afforded the opportunity (Roeser et al., 2012). Kegan and Lahey (2009) suggest that this resistance is related to both institutional commitments and unconscious personal processes. From an institutional perspective it appeared participants felt that whilst they stopped to attend the group, the overdrive outside of the group and the pressure on the organisation would not cease. If one is to consider this belief, and also acknowledges Malpass et al.'s (2012) suggestion that it can take time for people to experience the benefits of mindfulness, then this resistance would make sense. The practice of "being" was also challenging for a number of participants in relation to them experiencing some distressing feelings during the group. This in itself is not a new finding, as it has been found in

previous studies (Irving et al., 2012). However, this experience seemed particularly challenging for a couple of the participants due to it being within their work environment. While mindfulness provides the opportunity to experience "safe uncertainty" by enabling individuals to feel safe enough to explore and experience all types of emotions and thoughts that arise, this could raise a number of concerns for groups that are run in work settings. This is because in a work setting there are pre-existing relationships, hierarchies, and social orders. Indeed, Goffman (1955) suggested that individuals undertake what is called "face-work" which is the sense that even if one has emotional connection with one's work (like many of the participants), one still tries to present a "face" or image in this environment that is deemed acceptable.

A number of participants reflected that they started to make changes that were congruent with mindfulness practice, such as attempting to improve self-care and create more balance between their personal and professional lives. The shift in how number of participants related to their professional identity may reflect a similar process to the one some clinical populations have experienced in relation to their illness identity (e.g., Malpass et al., 2012). For example patients with long-term health conditions attending mindfulness groups have reported a reduction in their "over-identification" with their illness identity, and feelings of "becoming bigger" than their conditions (Chadwick et al., 2008). For some participants it could be construed that there was a realisation that although teaching was still important for them, they were "bigger" than this aspect of their identity, and that other aspects of their identity came more into focus (e.g., partner). These findings could be significant as Day, Kington, Stobart, and Sammons (2006) suggest that due to the

personal investment needed by teachers in their profession, this can lead to the continued allocation of their depleted emotional resources.

Despite the majority of the participants finding the mindfulness group helpful, only one continued to formally practice, although most continued to practice informally. This incongruence was explained as a dilemma by a number of participants who reflected that the rest of society was not very mindful. Moss and O'Neill (2003) suggest that despite its benefits, the mindfulness approach does not always have a good fit with a society that is hyper-consumerist and frenetic. Similarly Crane et al. (2010) have identified the challenge of introducing mindfulness into NHS settings that are busy and goal driven, as "like swimming up a stream" (p.84). Therefore, when considering the sense of "engulfment" experienced by all the participants in their role as teachers, alongside this narrative of a society being very much in doing mode, the lack of continuing mindfulness practice is perhaps not surprising.

Summary

The themes identified provide some insight into how mindfulness may positively impact upon some teachers' sense of professional identity, and consequently have stress reducing qualities. For many participants attending the mindfulness group initially appeared to promote a sharpening awareness of the contextual and internal processes that were contributing to their experience of work being overwhelming. This included facilitating an understanding that their professional role had become rather engulfing and all-encompassing. This increased awareness, if they felt able to tolerate it, provided a number of participants the opportunity to make positive lifestyle changes. This included

incorporating mindfulness practices such as improving self-care and introducing better boundaries between their professional and personal lives. In some respects this required a stepping back from their professional role, which enabled more space for other aspects of their lives to prosper. However, this sense of stepping back from the engulfment of their professional role and their changing relationship with it, rather than leading to disengagement from their job, appeared to have an opposite effect. That is, through the integration of mindfulness attitudes and practices (e.g., acceptance), and the reflective space the group allowed, participants experienced a sense of re-connecting with the part of their teacher identity that they really valued. This included most notably the experience of an improved ability to provide their pupils with nurturing relationships. However, although the overall experience of attending the mindfulness group for most participants was a positive experience, it was not without challenges. These challenges included connecting with difficult thoughts and feelings in the group and work environment, and the demand of integrating formal practice into everyday life in a society that is not conducive to mindfulness.

Limitations and further research

Due to the nature of qualitative research it is not expected that the participants' experience of attending a work-based mindfulness group can be applied to all teachers attending such groups. Although some of the findings may resonate with teachers working within both primary and secondary schools, the "school family" theme may be less transferable to teachers working in secondary education. Transferability is also limited as nine of the eleven participants were female, so the results may be less reflective of male teachers' experience.

However, the Department of Education and Employment School Workforce report (2013) recently reported that male teachers only make up 20% of the profession, indicating that the sample was fairly representative of the teaching workforce. The participants within this study were self-selecting so there is a possibility of response bias, as the eleven participants who volunteered may have had more positive experiences of the group. There is also a chance that social desirability bias may have been present, as the participants were aware that the researcher had a (tenuous) connection through the university with the group facilitator.

Teacher Stress Inventory (TSI; Fimian & Fastenau, 1990) scores were included in this study with the aim of providing some level of context for the teachers' stress levels going into the mindfulness course. However, although preintervention scores are presented, no follow up scores are provided. Although this was an intentional decision so as not to detract from the qualitative nature of the research, this is a limitation of the study. This is because it does not allow for contextual comparison of the qualitative findings following the mindfulness group. The usefulness of including the TSI as a measure of teacher stress is also limited due the fact that it was validated on an American rather than British population. This compromises the generalisability of the TSI's normative scores to British populations (Finnian & Fastenau, 1990). Indeed, the normative scores of the TSI could prove misleading for the teachers of this study, particularly in relation to the differences that may exist between the US and UK educational systems. In addition, the relative age of the measure may mean that its scores are not representative of normative stress levels in the modern teaching context.

Follow-up interviews may have been helpful as this may have provided a clearer indication of how the mindfulness practice and experience impacted upon the teachers over the longer-term. However, this was not possible due to the participants' time and availability. It is therefore recommended that further qualitative studies are undertaken with longitudinal follow-up, to explore how the experience of attending a work-based mindfulness group is understood over time. This could provide some more insight into the longer-term impact that attending such a group may have upon professionals, and particularly whether the tensions experienced in relation to continuing mindfulness practice are isolated concerns amongst the participants of this study. It would also be helpful in better understanding the continuing impact of mindfulness on teacher identity. If, as Fieman-Nemser and Floden (1986) suggest, teacher identity is constructed through the dynamic interaction between the individual and the environment, it is possible that in the context of a continued "culture of overdrive", teachers may become distanced from the skills learnt.

As mindfulness is continuing to be promoted as an intervention to reduce stress and burnout within helping-professions, future research could include exploring the experience of secondary school teachers. In addition, the pastoral role identified in this study likely extends beyond teaching to professionals from other disciplines (e.g., nursing, clinical psychology). As such, further research in these areas would build upon the findings from this study; which is the first to look into the impact of mindfulness on professional identity. In particular, a question may be how mindfulness may fit (or not fit) in relation to the professional values and sense of professional identity that may exist within these professions.

The recognised importance of teachers as attachment figures, alongside the implication that mindfulness could possibly influence this dynamic, also gives scope for a further avenue of research. Research in this area could look to measure changes in attachment relating between teachers and pupils as a consequence of mindfulness practice.

Clinical Implications

It is important to recognise that even if a mindfulness intervention is provided to non-clinical populations (e.g., teachers), this does not mean that it does not have clinical utility. Clinical psychologists may play an important part in the design, provision, and evaluation, of work-based mindfulness interventions, such as the one conducted in this study.

In addition it is important to recognise that when a mindfulness intervention is provided for a non-clinical population, this does not preclude the presence of clinical difficulties. In this study two participants felt somewhat exposed when connecting with previous/ongoing emotional problems and although this type of experience can be a valuable part of mindfulness practice, the fact that it was in a work, rather than clinical setting, needs to be considered. For the participants within this study strong relationships already existed and although providing positives (e.g., sense of belonging), this may not be the place where people want or expect to feel exposed. Consequently in practice it is important to consider how participants for such groups are referred and screened, alongside the issue of confidentiality within such settings, and what individual expectations are. This screening process could allow participants (and facilitator) to assess how appropriate the group would be for them at that time, and consider alternative

options/support if needed. It would also be useful for mindfulness groups in work settings to ensure adequate time and space to de-brief after each session to allow group members to prepare for returning to the work environment. This can be particularly important if they are returning to a system in "overdrive".

Despite posing some challenges, the sense that participants were able to have some time out from the "engulfment" of their job seemed to have a positive impact. From a clinical perspective the report from participants that they started to integrate a number of the mindfulness values into their lives (e.g., self-care) was important. This is because it has been found that such attitudinal and behavioural changes can play a role in reducing occupational stress (Flook et al., 2013). Thus, hopefully a mindfulness group provided to a non-clinical population such as this one within this study, can have significant merit as a preventative measure for those professions who are at high risk of stress and burnout. Also, if teachers are encouraged to better care for their own emotional needs and wellbeing, this will hopefully enable them to better provide this support for their pupils too, which would be in line with the Department for Education and Employment (2001); and NICE (2008) guidelines. Indeed, the sense that the participants found attending the mindfulness group helped particularly to "re-attune" to the needs of the children (particularly those who were challenging), was an important finding within this context. When considering the significant demands on Child and Adolescent Mental Health Services (CAMHS; 2009), a supportive and attuned school environment for children is vital.

There was a real sense that despite valuing the opportunity to attend the group, many participants struggled to allow themselves the time needed for the

mindfulness practice, as the system they were working in was so engulfing. As such, for the benefits of mindfulness interventions to achieve their potential there is an imperative need for managerial support and systemic change, which again clinical psychologists may be well positioned to facilitate.

As this research demonstrates, the application of a brief mindfulness intervention can have very positive consequences. Although the brevity of the course potentially made it more accessible to the teachers in this study, the findings suggest that unless mindfulness is valued and embedded in the workplace culture in an ongoing way, its benefits may be less sustainable. This would have important implications when considering the application of mindfulness groups to other workplace settings. The findings from this study also suggest that for workplace participants to remain engaged with mindfulness in the face of the many challenges it evokes, psychoeducation prior to the course about what to expect from the process may be helpful.

Reflexivity

Within this study it is possible that the researcher's previous experience of practicing mindfulness, and his long-standing interest in the subject may have influenced the findings. The researcher is aware that his own values fit very closely with those at the core of mindfulness, and he has personally had experience of its stress reducing qualities. It is important to reflect therefore that these feelings and beliefs may have influenced participant interviews, including the intonation of the questions, and how they were phrased. This may have also impacted upon how participants felt they should respond to questions leading to

possible demand characteristics. It is conceivable that how the researcher heard, perceived, and interpreted the said responses may have also affected the analysis, results, and ultimately conclusions.

As this study is part of a doctoral programme (with the stressors this can bring), there were times during the research process that the researcher felt as though he was engulfed, invaded, and working in overdrive. During this time he regularly practiced mindfulness to help him cope with these demands. It was therefore vitally important to ensure that attempts were made to "bracket off" this experience from those of the participants to ensure an honest and transparent account of their experience. In order to address this (and other reflexive issues), the researcher kept a reflexive diary, and attended regular research supervision, and specialist supervision provided by the university. The researcher also ensured that a rigorous and transparent data collection and analytic process were maintained, which were audited by supervisors and fellow trainees.

Conclusions

This study used IPA to explore the experiences of primary school teachers attending a work-based mindfulness group to reduce stress. The findings indicate a number of complex challenges and rewards for the participants. Themes of engulfment and invasion by the work demands were identified, with participants responding to this by working in overdrive. Attending the mindfulness group, however, provided participants the opportunity to step back from overdrive, reengage with their professional values of pastoral care, and feel they were connecting better with their pupils. Although positive on many levels, this shift also

provoked numerous tensions. Future research is needed which investigates the longer-term impact and experience of such interventions on teacher identity and stress.

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Appendix C

Participant Information Sheet



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Department Of Psychology. Clinical Psychology Unit.

Doctor of Clinical Psychology (DClin Psy) Programme Clinical supervision training and NHS research training & consultancy.

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or 0114 2226650

7th July 2014

How did teachers experience attending a mindfulness group?

You are being asked to take part in a research study. Before you decide whether or not to take part, it is important you understand why the research is being done and what it will involve. Please take some time to read the following information carefully and discuss it with others, if this is helpful.

Who is conducting the research?

My name is Mike Heaver and I am a Trainee Clinical Psychologist studying at the University of Sheffield. I am carrying out this piece of research as part of my training. I can be contacted via the telephone number or e-mail address at the top of the form.

What is the purpose of the study?

I am interested in finding out what it is like for teachers to attend a mindfulness group. I am interested in finding out what this experience means to them, their lives and teaching role.

Why have I been chosen?

You will be attending an 8-session mindfulness group within your school.

Do I have to take part?

You do not have to take part and can withdraw at any point during the study, without having to give a reason. If you do withdraw from the research any information that you have already given will be destroyed.

What will be involved if I agree to take part?

We will meet up at your school, or the university at a convenient time for you, and I will ask some questions about your experience of having attended a mindfulness group. The meeting will be audio-recorded in order for me to listen back at a later time. Tapes will be stored confidentially. Also, as part of the other research/evaluation project you are taking part in, you will be asked to fill a questionnaire. If you agree, I will also use some information from this questionnaire in the write up of my study. The purpose of this is to give contextual information about the group as a whole in relation to the other teachers. This information will again be anonymised and stored confidentially.

- What are the possible disadvantages of taking part?

Sometimes people find it difficult to talk about their experiences and at times can be upsetting. If you feel you want some extra support I would provide you with details of where you could get this. You would be able to access confidential support using the following numbers or e-mail:

Samaritans – Tel: 08457 90 90 90 or e-mail: jo@samaritans.org

MIND - Tel: 0300 123 3393 or e-mail: info@mind.org

- What are the possible advantages of taking part?

Sometimes people find it helpful to talk about their experiences and the information you give will help us to improve the delivery of mindfulness groups for other teaching staff. .

What will happen to the information that I give?

The information you give will be confidential and the report that is required as part of my training will be written in a way which makes it impossible for the reader to identify you.

During the interview you will be able to choose a pseudonym to be known as.

- Will anyone else be told about my participation in the study?

No-one else will need to be informed of your participation in the study.

- What if I want to complain about the way the study has been conducted?

You have the right to complain if you are unhappy with the conduct of the study. Please contact in the first instance my project supervisors Dr Georgina Rowse – email:

g.rowse@sheffiled.a.c.uk or Dr Lisa-Marie Berry – email: I.berry@sheffiled.ac.uk or at The Department of Clinical Psychology, University of Sheffield, Western Bank, Sheffield, S10 2TP.

Who do I contact if I have any questions?

If you have any questions please do not hesitate to contact me via e-mail: sop03mrh@sheffield.ac.uk or via the Department of Clinical Psychology, University of Sheffield, Western Bank, Sheffield, S10 2TP. You can also leave a message for me with our Research Support Officer – Christie Harrison on 0114 2226650.

- What do I do if I want to take part?

If you are happy to take part in the study you will be given this information sheet to keep and asked to sign a consent form that I will provide for you before the interview.

Thank you your time

Mike Heaver

Trainee Clinical Psychologist

Supervised by Dr Georgina Rowse and Dr Lisa Marie Berry.

Appendix D

TEACHER STRESS INVENTORY (TSI; Fimian & Fastenau, 1990)

Removed for copyright purposes

Appendix E

Mindfulness session overview

Week 1

Introduction Mindfulness and stress What's is mindfulness

Raison exercise

Body and breath exercise

Home Practice

This weeks led practice – Body-scan and Breathing Space

Week 2

Autopilot

Paying attention on purpose

Formal and informal mindfulness

Home practice

Daily Body scan

Daily mindful activity

Week 3

Noticing exercise

Judging

Wandering mind

Being and doing modes

Stress cycles exercise

Home practice

Daily body scan

Daily mindful breath

Week 4

Mindful movement

Noticing the body

Mind and body connection

Intentional movement

Awareness of breath

Mindful thoughts

Home practice

Meditation of choice

Week 5

Nature of thoughts

Riding out stress

Awareness

Acceptance and unpleasant experience exercise

Developing acceptance

Home practice

Completing unpleasant events diary

Meditation – accepting difficult things

Week 6

Being in the now Body Scan Seeking the pleasant A bigger container Negative Bias Home practice Meditation of choice

Week 7

Remembering kindness
Cultivating kindness
Benefits of kindness
Spending time feeling content
Home practice
Read kindness poem
Kindness exercise

Week 8

Re-balancing lives
Exhaustion funnel
Nourishing oneself
Noticing feelings
Compassion
Connecting with others
Home practice
Meditation of choice

Appendix F: Consent form



Department Of Psychology. Clinical Psychology Unit.

Doctor of Clinical Psychology (DClin Psy) Clinical supervision training and NHS research training & consultancy.

Clinical Psychology Unit Department of Psychology University of Sheffield Western Bank Sheffield S10 2TN UK

Participant Consent Form

Title of Research Project: An interpretative phenomenological analysis of primary school teachers' experiences of attending a mindfulness group Name of Researcher: Mike Heaver – Trainee Clinical Psychologist							
Pa	Participant Identification Number for this project: Please initial box						
1.	I confirm that I have read and up dated [] explaining the about and I have had the opportunity to	ove research project					
2.	I understand that my participation time without giving any reason a addition, should I not wish to an decline.	and without there being any n	egative consequences. In				
3.	I understand that my responses (and any data used from the other study/evaluation) will be anonymised and kept confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identifiable in the report or reports that result from the research.						
4.	I agree for the data collected fr	rom me to be used in future r	esearch				
5.	I agree to take part in the above	research project.					
Name of Participant		Date	Signature				
Name of person taking consent (if different from lead researcher)		Date	Signature				

To be signed and dated in presence of the participant Lead Researcher Date Signature To be signed and dated in presence of the participant Copies: Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/pre-written script/information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be placed in the project's main record (e.g. a site file), which must be kept in a secure location.						
To be signed and dated in presence of the participant Copies: Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/pre-written script/information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be placed in the project's main record (e.g. a site file), which	To be signed and dated in presence of the participant					
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Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/pre-written script/information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be placed in the project's main record (e.g. a site file), which	g					
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	signed and dated participant consent form, the letter/pre-written script/information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be placed in the project's main record (e.g. a site file), which					

Appendix G

Transcription confidentiality and guidance

Doctorate in Clinical Psychology, University of Sheffield

Transcribing Confidentiality Form & Guidance Notes

Type of project: Research thesis

Project title: An Interpretative phenomenological analysis of teachers' experiences of attending a mindfulness group.

Researcher's name Mike Heaver – Trainee Clinical Psychologist

The recording you are transcribing has been collected as part of a research project. Recordings may contain information of a very personal nature, which should be kept confidential and not disclosed to others. Maintaining this confidentiality is of utmost importance to the University. We would like you to agree:

- 1. Not to disclose any information you may hear on the recording to others,
- 2. If transcribing digital recordings only to accept files provided on an encrypted memory stick
- 3. To keep the tapes and/or encrypted memory stick in a secure locked place when not in use,
- 4. When transcribing a recording ensure it cannot be heard by others,
- 5. To adhere to the Guidelines for Transcribers in relation to the use of computers and encrypted digital recorders, and
- 6. To show your transcription only to the relevant individual who is involved in the research project.
- 7. If you find that anyone speaking on a recording is known to you, we would like you to stop transcription work on that recording immediately and inform the person who has commissioned the work.

Declaration

I have read the above information, as well as the Guidelines for Transcribers, and I understand that:

- 1. I will discuss the content of the recording only with the individual involved in the research project
- 2. If transcribing digital recordings I will only accept files provided on an encrypted memory stick
- 3. I will keep the tapes and/or encrypted memory stick in a secure place.
- 4. When transcribing a recording I will ensure it cannot be heard by others

- 5. I will treat the transcription of the recording as confidential information
- 6. I will adhere to the requirements detailed in the Guidelines for transcribers in relation to transcribing recordings onto a computer and transcribing digital audio files
- 7. If the person being interviewed on the recordings is known to me I will undertake no further transcription work on the recording

I agree to act according to the above constraints	
Your name	
Signature	
Date	

Occasionally, the conversations on recordings can be distressing to hear. If you should find it upsetting, please stop the transcription and raise this with the researcher as soon as possible.

Appendix H

Interview schedule

Preamble

Thank you for coming today. As you know, after reading the information sheet and consent form, you are taking part in a study hoping to understand more about the experiences of teachers attending a mindfulness course.

Before we start I would like to just go over a few things (revisit confidentiality, consent/information sheets, taping of interviews, storage).

It is important that you know that you don't have to answer questions if you don't want. I also want you to know that these questions are not a test and there are no right or wrong answers, I just want to know about your experience. Please feel free to give as much detail and as many examples as you like.

Do you have any questions before we start?

Background information

If it is okay, I would now just like to ask some questions to get some background information

Name/initials -

Gender -

Date/day of birth –

Years in teaching -

Number of sessions attended -

- 1. Based on your experience, what does mindfulness mean to you?
- 2. Can tell me what you remember about the experience of attending the mindfulness group?
- 3. During the time of attending the mindfulness group and doing the homework practices, did this have any impact upon you? If so, in what ways?

- 4. What has been your experience of practising mindfulness since finishing the mindfulness group?
- 5. Over the past few months did you experience any changes as a result of attending the mindfulness group?
- 6. How do you feel the mindfulness group and practices fitted with the values you held before attending the group?

Optional prompts: What did that mean to you? Can you tell me more about that? What did you understand by that?

That was the last question. Was there anything you thought that I might ask about that I didn't?

Thank you so much for taking part! I'd just like to check – how you are feeling now? How did you find the interview?

Would you like to receive a summary of the findings?

Yes/No.

Is there anything else you want to ask that you think it's important for me to know?

Thanks again,

Mike

Appendix I

Ethical approval

Forwarded Message

From: Richard Crisp <r.crisp@sheffield.ac.uk> Psychology

Research Ethics Application Management System

Date: Wed, 28 May 2014 08:52:43 +0100

To: Georgina Rowse <g.rowse@sheffield.ac.uk>

Your submission to the Department of Psychology Ethics Sub-Committee (DESC) entitled "An interpretative phenomenological analysis of primary school teachers' experiences of attending a mindfulness group" has now been reviewed. The committee believed that your methods and procedures conformed to University and BPS Guidelines.

I am therefore pleased to inform you that the ethics of your research are approved. You may now commence the empirical work.

Yours sincerely,

Prof Richard Crisp

Chair, DESC

Appendix J

Extracts from reflexive diary

Reflections after the interview (Alex)

Alex was very open during the interview, which was helpful. However, during the interview process I did sense a level of vulnerability about her. I noticed this had an impact upon my thought processes and behaviour – I think the interview may have benefitted if I had pushed her a little more when she was talking about some challenges she had faced. However, I noticed myself not wanting to embarrass her, especially in a work environment. I will listen to the interview to see if this comes across and will talk to my supervisor about it.

The types of stress Alex was talking about felt quit reminiscent of what I had been experiencing during the course – such as feeling overwhelmed by work, working at weekends etc. I need to be careful I do not over interpret or over identify with this – I think it will be good to talk to my supervisors and fellow IPA trainees about this. Interestingly when Alex was talking about having no space at school we were interrupted during the interview. Although I had put a sign on the door saying do not disturb – interview in process! A teacher walked into the room to collect something. Also during this interview, and the two previous ones today there were numerous times when children would knock on the window of the room, or shout things. At one point I almost remarked (when we were interrupted) that it was an example of what she had just been saying, but luckily was able to able to stop myself. I don't think this experience influenced the intonation of my further questioning, but I will listen very closely to the interview to reflect upon this. I will

also be helpful to listen to see if it impacted upon Alex. Again something I can take to supervision.

I noticed I was getting tired towards the end of the interview, as possibly was Alex.

— I was aware she has been teaching all morning, and this was my third interview in a row. I am wondering if the final question may have had less depth because of this, as we may have run out of steam.

Reflections after initial listening to interview

Interesting to listen back – I was quite relieved that my questioning was consistently open – and I think I was able to sound interested but neutral. It was interesting listening to Alex talking a lot about wanting to please people and be accepted – and I was wondering whether her generally positive feedback about the mindfulness experience could be influenced by her wanting to please me (I had made it clear I was not involved with group), but I am part of the university – so this may have impacted. However, the more I have listened to interview (focussing more upon her intonation and pitch), these felt congruent/matched to the experiences she was describing. Also, listening back I realise Alex was actually quite open about difficulties of attending the group and the practice – and I got a real sense that she was being open.

There are a few occasions where I feel quite frustrated that I didn't elicit more information and did not probe further on some questions. I think there were a times when it may have been helpful to ask more, but actually I think this would have meant interrupting her and I did not want to appear rude, or upset her (a core belief of mine influencing the interview process?). I wonder if that was linked to the feeling I reported after the interview of me being drawn into being protective?

When listening back I was struck by something that I had noticed when listening to some other interviews which is how the process of collecting information from a participants is not just affected by what you ask, but also by what you don't ask, or when ask it etc.

Development of emergent themes

Have been struck by Alex's need to provide a rich understanding of the context of pressures of teaching. I was getting a sense of Alex trying to make sense of the internal and external pressures that may have played a role in this. The words that keep coming to mind for are swamped, overrun, engulfed – something like this. There is a real sense of work previously being everything to Alex – but this not being helpful – impact on health. Very clear sense of job still being important – but more balanced? Also very clear that Alex really cares about her pupils and colleagues. The mindfulness practice/group seems to be understood as an opportunity to do things differently – be different even? Doing things differently not straightforward though – old habits hard to break? Paradox of trying to escape the past (be different now), but in some ways re-connecting with it too. This process of re-connection is good ("found myself"), and difficult ("tried to block out"). Am going to talk about these initial ideas for themes in supervision as feel am getting a bit lost in the transcript (swamped maybe? - Need to talk about this with peer supervisor – make sure the sense of being swamped is Alex's, not mine!), or at least I am not over-interpreting I am going to have a break from this process for a couple of days, as will do me good to have space and come back to it. I think I will cut-out the initial themes and have a visual representation of them on a flipchart. I also need to remind myself this process is iterative—things will change—develop (some things will be lost and that's okay!).

Appendix K: Transcript extract: Initial coding and emergent themes

Emergent		ipt extract: Initial coding and emergel cript – beginning at line 86	Initial noting	
theme				
	Int'ver	Do you think you could tell me about		
		what that meant to you please? -	Repetition of the word "work"	
Overdrive	Alex	Pretty much last year I was filling every	emphasising point – sentence full of word–as life was full of	
Overdrive		hour of my day with work. I was getting to	work?	
		work incredibly early, I was working	Talking faster-sense of intensity (anxiety?), when discussing this	
Poor boundaries		through breaks, I was working through	time. Work impinging on life –	
boundaries		dinner time, I was working until 6, and	physically (e.g., staying-late),	
		then I was getting myself worried about it	and psychologically (e.g., worrying at home).	
Anxiety		at home, so I was working extra then, and	Anxiety–recognition of internal pressure (putting on self).	
(spilling-over)		I was putting an awful lot of pressure on	History of poor self-care.	
		myself, and not really taking any time for	Personal responsibility Recognition of work stress, and	
Poor self-care		myself at all and it ended up with me	poor self-care leading to ill- health.	
i oui seil-cale		getting quite ill over it, and I have found	Mindfulness-change in priorities. Mindfulness was accessible –	
		that the mindfulness course helped me	only takes a few minutes.	
Readdressing		readdress my priorities in a way. In the	Time for self–valuing self–Alex	
priorities		importance of taking more time for myself,	recognising need to calm down – hyper-arousal? Mindfulness	
		like it only takes a few minutes, and it was	helpful–qualities (e.g., relaxing?)	
Mindfulness practical and		helping me relax and calm down.		
helpful	Int'ver	Could you maybe say a little bit more	Work priority (sense of some choice "my priority").	
		about that, if that's okay?	Work intruding/taking over-	
	Alex	My priority was work, pretty much and it	although some sense of it being out of control.	
		took over everything, I wasn't eating	Life outside of work shrinking – impact on health again – impact	
Invaded		properly, I wasn't exercising, I wasn't	on relationship.	
Poor self-care	r self-care	taking enough time for my partner, it was	"My priority" again – sense of choosing, but also possibility not	
Fooi sell-care		just, my priority was being as perfect at	knowing a different way. Perfectionism? Wanting to do a	
		work and that was at the expense of	good job- job important.	
Work priority (perfect)		everything else. Mindfulness made me	Mindfulness-related to	
(2011001)		think carefully about taking more time out.	reflecting/thinking differently. Think carefully (taking	
		And that has then fed into taking a	"mindfulness" seriously).	
Shift		moment in work. If I'm feeling really	Time-out – different/change illustrated – taking moment at	
Amaint		anxious about something I will stop and I	work (only a moment – but more than before?). Stop (opposite to	
Anxiety (contained)		will do some like a breathing exercise or	do/work).	
(I'll stop and listen to sounds.	Mindfulness qualities – breathing exercise/sound exercises– practical–integrated.	

Appendix L

Table of Themes

Alex

Overarching themes	Emergent themes
Engulfment	Invaded Overdrive Poor boundaries Conveyor-belt
Priorities	Work as everything Perfect Mindful-shift Self-care valued
The School Family	Caring Exposing Belonging
Recovery	Change as challenging Re-connection Catharsis Acceptance
Emotions	Overflowing Feared and faced Contained